COLLEGE OF HUMAN ECOLOGY

ADMINISTRATION

Alan Mathios, dean

S. Kay Obendorf, senior associate dean for research and graduate education

Carole Bisogni, associate dean for academic affairs

Karl Pillemer, associate dean for extension and outreach

Darryl Scott, director, admission, student, and career development

Tracey Thompson, college registrar

COLLEGE FOCUS

The College of Human Ecology anticipates and responds to human needs in the areas of nutrition and health, economic and social well-being, environmental design and technology, and human development through education, basic and applied research, and the extension of knowledge. The college is distinctively characterized by the quality of its research in the natural and social sciences and the design arts, a global perspective in academic programs, a preventive approach to contemporary societal problems, multi-disciplinary departments and programs, development of leadership in students and citizens, and a commitment to diverse populations. Faculty and students examine individuals in relation to their family, neighborhood, workplace, and community, seeking a balance between theory and practice that will improve the quality of everyday life.

FACILITIES

The college is housed in Martha Van Rensselaer (MVR), Savage, and Kinzelberg Halls; Mann Library; as well as the Biotechnology Building and Weill Hall. The buildings include administrative and faculty offices, classrooms, auditoriums, galleries, and lecture halls; wet chemistry and biochemistry laboratories; design studios and computer-aided design laboratories; woodworking shops; human factors and infant research facilities; and classrooms for distance learning. Also included are learning resource centers for career planning, a historical costume collection, a human metabolic research unit, an animal research facility, cold rooms, and a constant temperature and humidity laboratory.

Specialized equipment for teaching and research includes biochemical and chemical instruments for spectroscopy, chromatography, radioisotope analysis, electrophoresis, microscopy, and ultracentrifugation; physical testing equipment; and cameras, videotape, and sound recording equipment.

DEGREE PROGRAMS

Human Ecology programs lead to the degrees of bachelor of science (B.S.), master of arts (M.A.), master of science (M.S.), master of professional studies in human ecology (M.P.S.), master of health administration (M.H.A.), and doctor of philosophy (Ph.D.).

General academic information concerning the bachelor of science degree is given here under "Undergraduate Study." Curricula for major studies are described under the various academic areas.

Programs leading to master and doctoral degrees are administered by the Graduate School. They are described in the *Announcement of the Graduate School* and in announcements published by the individual field offices (Design and Environmental Analysis, Human Development, Nutritional Sciences, Policy Analysis and Management, and Fiber Science & Apparel Design). For information regarding the Sloan Program in Health Services Administration, contact the Department of Policy Analysis and Management.

UNDERGRADUATE DEGREES

Bachelor of science (B.S.) degrees are offered in the following areas:

Biology and society

Design and environmental analysis

Fiber science & apparel design

Human biology, health, and society

Human development

Nutritional sciences

Policy analysis and management

UNDERGRADUATE AFFAIRS

Persons interested in undergraduate study in human ecology should contact the admissions office, 170 MVR (255-5471). Those interested in graduate study should contact the graduate field representative identified among the faculty of each department. Department faculty members are listed at the beginning of the course descriptions for each department.

Counselors in the Office of Admission, Student, and Career Development (170–172 MVR) can help prospective students understand college programs and requirements, as well as college and university resources and services. They provide a broad range of career services and personal support for all matriculated undergraduates. The college registrar (146 MVR) assists undergraduates with questions about academic credit and graduation requirements.

The Student Body

The College of Human Ecology undergraduate enrollment is 1,250. Roughly 400 students graduate each year; last year 275 freshmen and 115 transfer students matriculated. Ninety faculty members serve as advisors to undergraduates.

The college's undergraduate admissions committee selects applicants who are academically well prepared and appear most likely to profit from the college's various curricula. Admission is highly selective. Approximately half of the student body comes from New York State, with the remainder coming from other parts of the United States and abroad. Approximately 30 percent identified as members of minority groups. Members of the college faculty chair the special committees of approximately 200 graduate students.

Mature Students

The college recognizes that students who interrupted their formal education and are returning to school have needs different from those of younger undergraduates. To facilitate the education of mature students, defined as those 24 years old or older at first matriculation, the college has adopted certain procedures specifically for that group. Counselors in the Office of Student and Career Development (172 MVR) can provide information of interest to mature students. Mature students may be permitted to enroll for as few as 6 credits and also are permitted to extend their residency beyond the normal eight semesters. To find out about qualifying for prorated tuition, mature students must see the college registrar during the course enrollment period in the preceding semester.

Transfer Students

Students may be considered transfer students once they complete 12 college credits after high school graduation. An external transfer student is one who transfers to Human Ecology from an institution outside of Cornell University. Liberal arts credits from other institutions transfer readily, but students must earn a minimum of 60 Cornell credits to graduate. Internal transfer students are admitted to Human Ecology from one of Cornell's other six undergraduate units. Students transferring internally should take special care to learn the policies of Human Ecology, because rules at the various Cornell colleges often differ. Before admission, both internal and external transfer candidates should contact the Office of Admission (170 MVR, 255-5471) to discuss credit transfer. Upon matriculation, admitted transfer students should attend the orientation and contact the Human Ecology registrar's office (146 MVR, 255-2235) to discuss how transfer credits will apply to their specific degree program.

Special Student Status

Students eligible for special status are those visiting from other institutions and interested in particular programs in the college, those with a bachelor's degree who are preparing for graduate study or jobs and careers in human ecology–related fields, or those who have interrupted their education and are

considering completing degree programs. Students accepted in the nondegree status of special student may enroll for a maximum of two semesters. During the second semester of attendance, a special student must either apply for admission as a transfer student or plan to terminate studies in the college at the end of the semester. Special students are expected to take a minimum of 12 credits each semester and to take one-half to two-thirds of their work in the statutory divisions of the university. Courses taken while a person is classified as a special student may be counted toward the requirements of the bachelor's degree. Those interested in becoming special students should make appointments to discuss admissions procedures in the Office of Admission (170 MVR, 255-5471).

Empire State Students

Occasionally, a student who is completing requirements for a degree through the Empire State College Program is interested in taking a human ecology course. This can be done by registering through the Division of Summer Session, Extramural Study, and Related Programs (B20 Day Hall, 255-4987). All rules of the extramural division apply, and registrations will be accepted only on a space-available basis and with the written approval of the course instructor. At the time of registration, Empire State College students must provide the extramural division with a completed copy of Empire State College's notification of cross-registration (form number SA-22, F-031) to verify enrollment in Empire State College. Such students will be charged 25 percent of the standard extramural tuition per credit.

MAJORS

The college requires students to fulfill requirements for a major to graduate. Students must declare a major by the end of the sophomore year. It is common for students to change interests during their undergraduate careers. Counselors in the Office of Student and Career Development (172 MVR), academic advisors, and directors of undergraduate study in each of the academic departments can help students to consider their options and engage in academic planning. All changes of major require submission of the change of major form and are processed through the college registrar's office, 146 MVR. Change of major will trigger re-evaluation of all academic credit and assignment of a new faculty advisor.

DESIGN AND ENVIRONMENTAL ANALYSIS

The Department of Design and Environmental Analysis (DEA) is concerned with planning, designing, and managing the built environment and its effects on human behavior, experience, and the environment itself. The processes for creating, managing, and maintaining the built environment, and the implications for how we live our lives face enormous challenges. These include frequent social and organizational change, technological advances, new building methods, and finite resources. The program in DEA is dedicated to preparing graduates who can help individuals, groups, and organizations meet these challenges.

Diverse faculty backgrounds and teaching approaches help students to develop multidisciplinary problem-solving and creative abilities, aesthetic judgment, and analytical thinking. Students explore innovative concepts for the design and management of interior environments through laboratory, shop, studio, and computer facilities. The relationship between people and their physical surroundings is explored through a combination of academic courses, field experience, and applied research. Examples of student class projects and faculty work are frequently on display in the MVR gallery. The DEA resource center includes books, journals, newsletters, and material samples for student use.

DEA Honors Program

The honors program, which leads to a B.S. degree with honors in Design and Environmental Analysis, gives official recognition to students who have demonstrated excellence in their academic work and their capacity for independent research. In addition to fulfilling the requirements for their major, students in the honors program prepare and orally defend an honors thesis. Honors students work with a research mentor in preparing for their thesis. Interested students should obtain a DEA Honors Program application form online. For more information, students should visit the DEA website: www.human.cornell.edu/che/DEA/Academics/Undergraduate/ughp.cfm or contact the DEA Honors Representative, Alan Hedge.

Options

The department offers undergraduate education in three areas: interior design, facility planning and management, and human factors and ergonomics. The interior design option is nationally accredited by the Council for Interior Design Accreditation. The Facility Planning and Management Program at Cornell is an IFMA recognized program. This means that it meets the standards for recognition of programs established by the International Facility Management Association.

To take full advantage of the course sequences and electives, it is important to select an option as early as possible. This is particularly true in the interior design option. Transfer students in the interior design option should plan on a minimum of six semesters at Cornell to complete the program.

Option I: Interior Design

This option prepares students for professional careers in interior design. The program emphasizes a design process in which innovative solutions are based on research-derived knowledge of human behavior, values, and attitudes. Students develop an understanding of design theory and methods, design history, behaviorally based programming, and post-occupancy evaluation. They learn about design communication, building systems, furnishings, materials and finishes, and professional practice. Students may use their elective courses to develop a specialization in areas such as design history, historic preservation, theory and criticism, design leadership, interactive multimedia, design sustainability, and behavior-based design.

This program also serves as an excellent preparation for graduate study in interior design, facility management, architecture, and industrial design.

Option II: Facility Planning and Management

This option prepares students for professional careers in facility management. The program focuses on the planning, design, and management of facilities for large, complex organizations such as corporations, health care institutions, research and development laboratories, and universities. Facility planning and management is a basic management function that coordinates and integrates information and expertise from areas such as planning and design, real estate, and business administration with human factors, ergonomics, environmental psychology, telecommunications, and building operations for the purpose of developing and managing facilities that support individual and organizational effectiveness.

Excellent career opportunities exist in the facility management divisions of private companies, institutions, the health care industry, and with private consulting firms offering facility management services. The program is also a good preparation for graduate study in business, planning, or one of the design disciplines and for advanced study in facility planning and management.

Option III: Human Factors and Ergonomics

This option focuses on the interaction between people, technology, and their physical surroundings. The program seeks to expand understanding of how technology and the environment affects human perception, cognition, motivation, performance, health, safety, and social behavior. This knowledge is then used to help architects, planners, interior and product designers, and facility managers to plan, design, and manage safe and effective environments. This knowledge is also applied to human-computer interaction usability issues. The effect of human capabilities or characteristics such as family structure, lifestyle, social class, and stage-in-life cycle on environmental needs and requirements is also a focus of the program. Career opportunities are available in software firms, high-technology companies, design firms, and in urban planning and other public agencies, as well as in the facility management and product design division of private companies. Human factors and ergonomics is good preparation for graduate study leading to a Ph.D. degree in the social sciences and a career in academic or other research-oriented settings in either the public or private sector. It can also serve as the basis for graduate study in an environmental planning or design discipline such as architecture, facility planning and management, interior design, landscape architecture, or city and regional planning. Electives in the social sciences and in research methods and statistics are encouraged.

Academic Advising

During their first semester, all DEA majors are matched with a faculty advisor by the director of undergraduate studies.

Consultation with faculty advisors about future goals, departmental requirements, sequences of courses, and electives inside or outside the college helps students develop their programs. Students majoring in interior design, especially, must begin early to plan and collect materials for a portfolio of their work, which is necessary for many positions and for application to graduate schools. Faculty advisors can make recommendations on what to include. Students are free to change advisors. Although advisors should be consulted about students' schedules during course enrollment each semester, it is the student's responsibility to keep track of his or her courses and to make sure that they meet graduation requirements for their major and college.

Ownership and Exhibition of Student Work

All design work done in studios as part of an academic program is the property of the department until it has been released by the instructor. The department is not responsible for loss or theft of student work.

FIBER SCIENCE & APPAREL DESIGN

The Fiber Science & Apparel Design (FSAD) major is unique in the Ivy League, combining a strong liberal arts foundation with excellent training in apparel and fibers. FSAD offers a broad range of courses, from the art of designing apparel and accessories, to the business of manufacturing and marketing them internationally, to the science of textiles and fibers.

All FSAD students receive an introductory exposure to the basics of textiles and design. Students then choose one of three options that emphasize the application of design principles, management and marketing, or the physical and material sciences. Students may combine courses from more than one option if they choose.

Academic course work is further enhanced by field and international experiences and significant opportunities to do independent projects for credit with individual faculty members. Gallery space provides the setting to display design work. In addition, the Cornell University Costume Collection, housed in the department, provides a valuable resource; items from the collection are made available to students for classroom and special study use.

Academic Advising

All FSAD majors are matched with a faculty advisor by the director of undergraduate studies, Professor Charlotte Jirousek. Students are strongly urged to discuss their goals, course selection and sequence, electives, and career plans with their faculty advisor. Students in apparel design must begin working with their advisors early to develop a professional portfolio of their work. Students are free to change advisors; changes must be recorded with the director of undergraduate studies. Although advisors oversee course selection for the following semester, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for his or her major and college.

Student Work

All apparel design work done as part of the academic program will be held by the department until it has been released by the instructor. Certain exceptional work may be used by the department to exhibit for academic purposes. The department is not responsible for the loss or theft of student work.

Course Fees

No grade will be given in a course unless the course fee has been paid and equipment returned by the last week of classes.

Options

Students may select options in apparel design, apparel/textile management, or fiber science. Most transfer students will need at least one extra semester to fulfill the requirements of the major. Transfers in the design option should plan on two additional semesters.

Option I: Apparel Design

The Apparel Design option relates the human need for fashionable and functional clothing and accessories to design principles and to the physical properties of textiles. Students take a sequence of studio courses, focusing on the manipulation by hand, eye, and computer of form, color, and fabric, as well as courses in the social, economic, historical, and cultural aspects of design. Many students participate in design competitions sponsored by the fashion industry.

Option II: Fashion Design

The Fashion Design Management option applies management and marketing principles to industry and consumer issues in this sector of the economy. Courses focus on the processes used to develop, manufacture, and distribute apparel and textile products and examine topics such as business organizational structures, globalization, product development, communication, advertising and marketing, and entrepreneurship. Students combine theory with case studies to find solutions to everyday problems.

Option III: Fiber Science

The Fiber Science option teaches the physical, chemical, and engineering properties of fibrous materials, advanced engineering composites, geotextiles, and protective clothing, as well as the more traditional applications found in apparel interiors. The fiber science option provides a strong base in mathematics and the physical sciences combined with supporting courses in engineering, consumer economics, and the social sciences.

Career Opportunities

Graduates of programs in the Department of Fiber Science & Apparel Design have found challenging employment within the apparel and textile sector, in independent and government-sponsored research, and in community organizations. In addition, the program prepares students for graduate or professional study in apparel design, apparel or textile marketing, business and management, or fiber/polymer science. Some students continue professional study in business, law, or medical school.

Apparel students design for influential fashion houses and under their own labels. Graduates also do specialized design in fields such as military, athletics, and public safety; create innovative clothing for special populations such as children, senior citizens, and the physically challenged; and use their creativity in public-relations firms, theater, publishing, and promotion.

Graduates of the Apparel and Textile Management program are attractive candidates for leadership positions in fashion and other industries. Students who go on to graduate work are well prepared for advanced programs in fields such as business administration, marketing, economics, law, textiles, communication arts, and education.

Recent graduates of the Fiber Science program have begun careers in the fiber and textile industries as well as with government agencies developing and evaluating new products, conducting research, providing technical services, helping to ensure product safety, and coordinating consumer information programs.

HUMAN BIOLOGY, HEALTH, AND SOCIETY

The human biology, health, and society (HBHS) program permits students to combine their interests in the biological sciences while exploring human health issues from the perspectives of both the biological and behavioral sciences. HBHS majors select the issues they want to explore in depth from Human Ecology courses that address health and the broad range of factors that influence human well-being. Issues that can be explored include biology and behavior; metabolism, genetics, and health; biology, growth, and development; and food and health policy and health promotion. Most students in this program will proceed to programs of advanced study to pursue careers related to health. This major is offered by the Division of Nutritional Sciences. More information about this program can be found in a separate section of the catalog that describes the division's programs.

HUMAN DEVELOPMENT

The field of human development covers the entire life span and has benefited from the contributions of many disciplines. Human development majors explore the psychological, social, cultural, and biological development of people from conception to old age, focusing on the processes and mechanisms of growth and change over the life course. An important emphasis is the role that social institutions such as schools, workplaces, and neighborhoods play in human development, as well as the influence that developing people have on their environments. The human development major provides an excellent foundation for many professional careers, such as law, medicine (pediatrics, geriatrics, and psychiatry), clinical psychology and other mental health professions, education, social work, other health-related professions, business, nonprofit management, and advocacy. Many human development graduates attend graduate school in the fields of human development, psychology, and sociology.

Classes in human development cover a wide range of issues and approaches, and are organized into six different areas: social and personality development, cognitive development, human developmental behavioral neuroscience, aging and health, law, and psychology and human development. The faculty in the Department of Human Development come from multiple disciplines, including developmental psychology, neuroscience, clinical psychology, education, and sociology. The research of the department's faculty is extensive and world renowned and includes issues such as the neurobiological basis of personality, the role of childhood attachments in the development of adult romantic relationships, the acquisition of language in infants, the effects of environmental stressors on children's cognitive development, interventions to prevent and mitigate the impacts of child maltreatment, risk-taking during adolescence, risk and resilience factors affecting reactivity to stress across the life course, the epidemiology of elder mistreatment, memory and the legal system, health care decision making among older people, and strategies to prevent social isolation and promote social integration among older people.

Curriculum

Human development is one of the most diverse majors in the College of Human Ecology. While all students learn the fundamentals of human development, students also focus on one or more areas of particular interest (e.g., social and personality development, aging and health; law, psychology, and human development). The major is flexible enough to give students ample opportunity to meet the requirements for admission to professional degree programs, including medical, dental, law, public health, social work, and business schools. Requirements specified by the College of Human Ecology make up part of each student's curriculum, and include classes in the social and natural sciences, humanities, and writing. To fulfill department and college requirements, Human Development majors must take a biology course with lab.

Special Opportunities

Beyond the required formal course work, students in human development have many other opportunities that involve ongoing individual work with Cornell faculty or other professionals. Academic credit can be earned through all of them, up to the limit specified by the college (with some restrictions noted below).

Laboratory courses. Human development students may earn credit toward the major by taking formal courses designed to teach laboratory and other research techniques, including study design, data collection, and data analysis. Students may count one of these courses toward the credits required for the Human Development major. Additional elective credits can be earned toward graduation by enrolling in individual faculty research programs, as described below.

Faculty research. Many human development students work for several semesters as research assistants on faculty projects. On these projects, students get further training in research techniques such as laboratory experiments, surveys, and scientific behavioral observation. Participation in faculty research provides the type of experience that many graduate and professional schools expect from their top applicants. Recent projects involving students have included (1) language acquisition among infants in bilingual households or settings, (2) experimental studies of risky decision making among teens, and (3) the impact of poverty on stress responses in children and teens. Participation in faculty research for credit counts as elective credit toward graduation in the College of Human Ecology (up to the limit specified by the college).

Independent research. Under faculty supervision, some advanced students complete an honors thesis. Applications to enter the honors program are due in the first semester of the junior year. Honors theses typically involve a topic related to faculty research, and all applicants must have experience working on research projects and must meet other program requirements. Seniors in the honors program register for an honors seminar and for honors thesis credits. The seminar and honors thesis credits count as elective credits toward graduation in the college (up to the limit specified by the college).

Field Placements. Human development majors can arrange internships with Urban Semester in New York City, Cornell in Washington, and Cornell Abroad programs. Students may also arrange internships during the fall and spring semesters in the Ithaca area. All such field placements are required to be under the supervision of a human development faculty member. In recent years, human development students have participated in projects with the Tompkins County Office on Aging, the Tompkins County Human Service Coalition, Kendal of Ithaca, local schools, the Tompkins County Youth Bureau, and the Law Guardian's Office of Tompkins County. Summer internship credit is not allowed in Human Development unless the student is enrolled for Cornell University credit over the summer. Field Placement credits count as elective credits toward graduation (up to the limit specified by the college).

Undergraduate Teaching Assistantships. Advanced students can serve as undergraduate teaching assistants. The teaching assistantship requires work with the professor teaching the course as well as contact with students. Undergraduate teaching assistantships are for credit only. Teaching assistantship credits count as elective credits toward graduation (up to the limit specified by the college).

Teaching Certification. A cooperative education program exists between the Department of Human Development and Wells College. This program requires careful planning and course scheduling. It enables students to graduate with a Cornell bachelor's degree and New York State Certification to teach nursery school through sixth grade. This certification is honored by most other states.

The program requires a minimum of a three-semester commitment. Cornell HD students take a minimum of four courses at Wells College and student teach their last semester at Cornell. Although there is van transportation between Cornell and Wells College, it is important for students to have access to a car, especially while student teaching. Students will be registered at Cornell during the entire undergraduate program and usually maintain Ithaca housing. Wells College courses count as Cornell courses and are used as electives but are not included in a student's GPA. The one-semester student teaching experience is typically based in the Ithaca area, though not necessarily within the city of Ithaca.

This program is open to HD majors only. Students must have at least a 3.0 Cornell cumulative GPA upon application and must maintain a 3.0 GPA to qualify for student teaching and to complete the program. For more information, contact Elaine Wethington in G96 MVR at 255-2918.

NUTRITIONAL SCIENCES

A major in nutritional sciences focuses on the complex interrelationships of food patterns, nutritional status, and health. This field draws upon chemistry, biology, and the social sciences to understand questions such as: How are nutrients used by the body? What factors influence human food choice? What nutrients and dietary patterns are recommended to promote growth, maintain health, or reduce the risk of chronic disease? Students in this program may also fulfill the courses required for didactic training in dietetics toward becoming a Registered Dietitian, which will enable them to be employed as nutrition counselors, clinical nutritionists, sports nutritionists, or administrators of food and nutrition services. Students also may prepare for medical school and other types of advanced degree programs through this major. The requirements for this program are outlined in the "Nutritional Sciences" section of this catalog.

Special Opportunities

Dietetics and Clinical Nutrition

Students who wish to work in the areas of clinical nutrition, nutrition counseling, sports nutrition, community nutrition, or food and nutrition management should complete the academic requirements for The American Dietetic Association (ADA). The Didactic Program in Dietetics is accredited by the Commission on Accreditation of Dietetics Education and provides students with the coursework necessary for application to accredited, supervised practice programs (e.g., dietetic internships). Students successfully completing didactic program requirements at Cornell are issued a Verification Statement. A one-time fee is charged for program materials and transcript evaluation. The Didactic Program in Dietetics policy and procedure for issuing Verification Statements can be found at nutrition.cornell.edu/che/DNS/academic/dietetics.cfm. Upon completion of an accredited supervised practice, students are eligible to take the Registered Examination of the Commission on Dietetic Registration, and become a Registered Dietitian.

Courses in foods, nutrition and disease, microbiology, food service management, and nutritional care are added to the courses required for the nutrition programs. For additional information about meeting ADA requirements, contact the DNS academic affairs office, B19 Savage Hall, 255-2628.

Exercise Science Minor

Students can complete the Applied Exercise Science Concentration at Ithaca College, which includes courses in kinesiology, exercise physiology, and biomechanics of human movement. Nutrition courses of special interest relate to growth and development, regulation of body weight, and community nutrition and health. For information about the Applied Exercise Science Concentration, contact the DNS academic affairs office, B21 Savage Hall, 255-4410.

POLICY ANALYSIS AND MANAGEMENT

In the Policy Analysis and Management major, students and faculty study the effects of government policies on individuals and families, public health, education, crime, product markets, financial markets, and a wide variety of other social impacts. The research tools learned and used—robust theory, rigorous empirical quantitative skills, practical applications to real-world policy issues—are highly sought after by the best in both industry and government.

Federal, state, and local governments have a central impact on all aspects of American life. The federal government alone taxes and spends in excess of 25 percent of gross domestic product. Public policy is ubiquitous, covering almost all aspects of societal and market interaction, from the environment to immigration, banks to farming, and social security to crime. Among current major government legislative initiatives are national health care, financial market regulation, education policy, immigration, and tax policy. Getting legislation right is crucially important to individuals, families, and society at large. Studying, understanding, and learning from the impacts and externalities of government policy are at the heart of Policy Analysis and Management.

Making full use of the theories and methods from economics, sociology, psychology, and demography, Policy Analysis and Management majors first seek to understand the theoretical effect of government policy. Using robust data analysis techniques, PAM majors learn how to measure the magnitude of policy effects. Through published findings, Policy Analysis and Management faculty members help to inform the public debate.

Current Policy Analysis and Management faculty members have expertise in health care, family/social welfare, financial markets, transportation, social security, FDA regulation of pharmaceutical advertising, education, crime, law, and the economics of obesity, among others. Undergraduate and graduate students take courses from, and conduct research with, experts in the field.

In addition to students entering the labor market into management, government, and research positions, PAM attracts large numbers of pre-law and pre-MBA students, and students intending to pursue graduate studies in economics, sociology, and public policy. There is the potential to complete a five-year program resulting in either a B.S. and M.S. in Policy Analysis and Management, or a Master of Health Administration through the department's Sloan Program.

In addition to learning basic policy analysis and management skills, the student will be expected to apply these skills within particular areas of policy focus. Upper-level family/social welfare courses cover a panoply of governmental and private-sector income maintenance, social, and human service delivery programs and policies that range from child adoption, neglect, and abuse policies and antipoverty programs to policies and programs that impinge on or regulate marriage, divorce, and fertility. Upper-level health policy courses cover programs and issues such as health care access, the Medicare and Medicaid programs, long-term care, managed care, public health issues such as obesity, and substance abuse policies. Upper-level market regulation courses cover programs and policies governing the regulation of advertising, the regulations of financial institutions, risk and insurance markets, food and drug safety, and public utility markets. They also deal with issues such as privacy, the Internet, and television.

In addition to meeting college requirements, all PAM majors are expected to take the following core courses: Introductory and Intermediate Policy Analysis, Demography and Family Policy, Statistics, Multivariate Statistics, Intermediate Microeconomics, and Public Sector Economics. Multivariate Statistics and Intermediate Microeconomics must be completed by the second semester of the sophomore year.

PAM Honors Program

The honors program, which leads to a B.S. degree with honors in Policy Analysis and Management, gives official recognition to students who have demonstrated excellence in their academic work and their capacity for independent research. In addition to fulfilling the requirements for the major, students in the honors program will participate in an honors seminar and prepare an honors thesis. Honors students work with a research mentor in preparing for their thesis. Interested students should obtain a PAM Honors Program application form from the PAM Undergraduate Office (122 MVR). For more information, students should contact the PAM director of undergraduate studies.

PAM Minor Program

Students from outside of PAM can complete a 15-credit official minor in Policy Analysis and Management. For further information, see the PAM website or pick up information at the PAM Undergraduate Office (MVR 122).

INTERDEPARTMENTAL MAJOR IN BIOLOGY AND SOCIETY

Biology and society is a multidisciplinary program for students with special interests in such problems as genetic engineering, environmental quality, food and population, the right to medical care, and the relation between biology, society, and ethics and/or public policy. It is also designed for students who plan postgraduate study in management, health, medicine, law, or other related fields.

Because the biology and society major is multidisciplinary, students must attain a basic understanding of each of the several disciplines it comprises, by including courses in the fields of biology, humanities, social sciences, and mathematics. In addition, majors take core courses in biology and society, a set of electives, and a special senior seminar.

Course work in the College of Human Ecology may be selected from concentrations in human development, health, or social policy and human services. The other basic requirements of the college must also be met. Programs incorporating those required courses are designed in consultation with a faculty advisor to accommodate each student's individual goals and interests. For further information on the major, including courses of related interest, specific course requirements, and application procedures, see Kay Obendorf, director of undergraduate studies, in 182 MVR.

SPECIAL OPPORTUNITIES

Study Abroad

Each year over 75 Human Ecology students spend a semester or more off campus in places spanning the globe, from Australia to Zaire. There they supplement their Cornell studies with a wide range of cross-cultural and academic experiences. Study-abroad opportunities are available through Cornell–sponsored programs and other U.S. college–sponsored programs as well as by direct enrollment at foreign universities.

Exchange Programs

New exchange agreements with leading international universities allow Human Ecology students to gain a global outlook and advantages for their future career development. Students coming to Cornell as part of the exchange programs enrich the experiences of Cornell students in Ithaca. The Hong Kong Polytechnic University exchange program provides specialized study for students interested in fiber science, apparel design, and interior design. The exchange agreement with the University of New South Wales, Sydney, Australia, provides a study abroad opportunity for all Human Ecology students and specialization opportunities for students interested in facilities management and interior design. For more information, see the Human Ecology Exchange Program website.

Residency Requirements

All study-abroad students must meet college study-abroad requirements and remain registered at Cornell during the overseas study. Credits earned count toward the 60 Cornell credits required for graduation (in unusual circumstances some credits earned abroad may be considered as transfer credit).

Requirements for College Approval

1. GPA of 3.0 or higher, good academic standing, and well-articulated goals for students' study abroad semester.
2. Completion of the Cornell application; applications from individual programs also must be submitted to Cornell.
3. Completion of the equivalent of 15 semester credits per semester while abroad.

4. Courses taken for a letter grade (unless course is offered with only an S–U option).
5. Submission of a petition by second-semester seniors going abroad.

Application Process

Typically, students considering study abroad begin their planning at least a year before the semester abroad. Students should carefully consider what they hope to get out of a study-abroad experience (academically and culturally) when investigating program options. Resources can be found in the Cornell Abroad office (300 Caldwell Hall), through the Human Ecology study-abroad advisor (170 MVR), or in the Human Ecology Career Exploration Center (162 MVR). Completed applications must be submitted to the Human Ecology registrar's office by the following dates:

Fall and year deadlines: February 1

Spring deadline: September 15

Some programs will be filled by these dates. Use of the early deadlines is strongly recommended. These are:

Fall and year deadlines: December 15

Spring deadline: May 1

Approved applications will be signed and forwarded to the respective programs through the Cornell Abroad office.

Credits Abroad and Transfer of Credit

Most study abroad courses are transferred to the Cornell degree program as electives or liberal arts distribution credit. Study abroad credit awarded toward one's major is much less common and must be approved via signature of the student's department advising coordinator on the Cornell application. Credit for study abroad will be awarded only after successful completion of the semester abroad (marks equivalent to a Cornell grade of C or higher) and receipt of the official transcript by the college. Official transcripts should be sent to the Cornell Abroad office, which will process and forward them to the Human Ecology registrar.

Courses must be pre-approved before the student's departure. Any variances must be cleared with Human Ecology. Students must include a foreign language course in the country's native language if studying in a country where English is not the native language. All courses taken abroad and grades received will appear on the Cornell transcript. Grades earned do not, however, become part of the Cornell GPA. Students should save all written work from all classes until courses are officially transferred.

Independent Research

Research opportunities for undergraduates are extensive and valued as an important part of the learning experience. The opportunity to engage in substantive research with some of the leading scientists in their fields is so compelling that approximately half of the college's undergraduates conduct research projects. Students may become involved in research with the guidance of faculty members by conducting research assigned in a class, joining a faculty member's research group, completing an independent study research project, or carrying out an honors program project.

For further information, students should contact individual faculty members or the director of undergraduate studies in their department.

Honors Programs

Students interested in college honors programs that lead to the degree "bachelor of science with honors" usually apply to the appropriate honors committee no later than the end of the first semester of their junior year. A minimum GPA of 3.3 and demonstrated potential for honors-level research is required. Students take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and defend it in an oral examination. Students who are interested in the honors program should contact the director of undergraduate studies in their department or division for information and guidelines.

Field Study and Internships

Field study and internships provide experiential learning opportunities in real-life circumstances where classroom knowledge is tested and applied. Students are able to master new skills, develop and implement plans of action, solve problems, interact in multicultural situations, and build networks for future job opportunities. By applying techniques of research methods, critical thinking, and self-directed learning, students learn to think conceptually while becoming agents of change.

Check with the director of undergraduate studies for major-specific information. The Career Exploration Center (162 MVR) and career counselors in 172 MVR also can provide resources and assistance in finding internships and other experiential opportunities.

Concentrations

The College of Human Ecology formally recognizes as concentrations computer information sciences and international relations (both administered by the College of Arts and Sciences). Students interested in pursuing these concentrations should inquire with the college department offering them. If successfully completed before graduation, these concentrations will be posted as part of the student's official transcript.

Students may develop an unofficial concentration in additional fields taught at Cornell by taking 12 credits in an approved area. Africana studies, communications, and business are just a few examples of concentrations that are possible. While these unofficial concentrations are not part of a student's transcript, students may choose to publicize these concentrations on their personal résumés.

Minors

A student may pursue a minor in any department in any college that offers them, subject to limitations placed by the department offering the minor or by the student's major. Completed minors will appear on the student's transcript. Not all departments offer minors. Consult the appropriate section in this catalog or contact the appropriate department for information on minors offered and how to pursue a minor. The following minors are offered by Human Ecology departments/divisions: fiber science, gerontology, global health, nutrition, and policy analysis and management.

Minor in Gerontology

For students interested in pursuing study related to aging, the College of Human Ecology, under the auspices of the Bronfenbrenner Life Course Center, offers the option of completing an undergraduate minor in gerontology. This program is designed to develop an understanding of and competence in dealing with the processes and issues of aging. Study in gerontology enriches the practical experience of students and prepares them for professional work in this area. The program draws on the resources of several departments and colleges at Cornell to shape a curriculum suited to each student's professional goals and interests. Courses at Ithaca College's Gerontology Institute may also be taken toward the gerontology minor.

The gerontology minor is available in combination with any undergraduate major offered by the university. Twelve credit hours of course work must be completed. The courses explore aging through biology, psychology, sociology, economics, and design.

Experiential learning opportunities are strongly recommended as a complement to classroom work. Students may join the "Cornell Elderly Partnership" through the Cornell Public Service Center to participate in local visits to elders. There also are opportunities for undergraduates to become involved in research projects examining topics such as residential changes and adjustments in the later years, nutrition and elders, social security, and design for people with dementia. In addition, senior students can apply to work as a teaching assistant for a gerontology course.

Departments and programs have designated academic advisors for the gerontology concentration who will help students plan the sequences of courses and electives needed to complete both a major and the gerontology minor. Because many gerontology courses have prerequisites, early and careful planning is essential.

Program requirements may be obtained online at www.blcc.cornell.edu/education_gerontology.html; from the Human Ecology registrar's office (146 MVR, 255-2235); or from the program coordinator Nancy Wells, Design and Environmental Analysis (E220 MVR, 254-6330).

Minor in Fiber Science (FS)

Starting in fall 2010, the Department of Fiber Science & Apparel Design (FSAD) will offer a minor open to all Cornell undergraduate students.

The minor requires 12 or 13 credit hours of work with FSAD. No substitution for the required courses for the minor will be permitted.

Course Requirements

To minor in FS, a student must complete the following requirement:

1. Complete one of the following courses
   a. FSAD 1350 Fibers, Fabrics, and Finishes 3
   AND
   FSAD 1360 Fiber and Yarn Analysis Laboratory 1
   OR
   b. FSAD 2370 Structural Fabric Design 3
   OR
   c. FSAD 4320 Product Quality Assessment 3
2. Complete the following courses
   a. FSAD 3350 Fiber Science 3
   AND
   b. FSAD 4360 Fiber Chemistry 3
3. Complete one of the following courses
   FSAD 4660 Textiles, Apparel, and Innovation 3
   FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers 3
   FSAD 6200 Physical Properties of Fiber-Forming Polymers and Fibers 3
   FSAD 6260 The Chemistry of Textile Finishes and Dyeing 3
   FSAD 6390 Mechanics of Fibrous Structures 3
   FSAD 6660 Fiber Formation: Theory and Practice 3

Admission Requirements

1. Complete the Intention to Minor in Fiber Science (MiFS) form to get preference for the above-mentioned FSAD courses, if they are oversubscribed. Forms will be available from the undergraduate coordinator in 207 MVR Hall.
2. Keep a copy of the MiFS form for your reference. To receive consideration or priority in FSAD course enrollment, a form must be submitted before the semester in which enrollment is desired.
3. Plan a course of study to complete minor requirements. Keeping track of courses required and completed toward the FS minor is the student's responsibility; students will not be assigned a FSAD advisor.
4. Earn a grade of B- or better in each course required by the minor. S-U is not accepted.
5. During the semester in which you are planning to graduate, submit a copy of the Application to Graduate with a Minor in Fiber Science form, and an unofficial transcript to the undergraduate coordinator in 207 MVR Hall. After proper verification your college registrar will be notified, and your final transcript will indicate that you have earned a minor in Fiber Science.

Questions should be addressed to Valorie Adams, undergraduate coordinator, or Prof. Charlotte Jirousek, director of undergraduate studies.

THE URBAN SEMESTER PROGRAM IN NEW YORK CITY

Multicultural Issues in Urban Affairs

Sam Beck, Ph.D., director

The Urban Semester Program is a set of courses spanning the entire year. Students choose either fall or spring semester and enroll in three classes focusing on the opportunities and barriers that a multicultural society presents and their relationship with professional, community, or public policy settings and concerns (15-credit residential program). They also intern three days each week in placements of their choosing. One day each week, students carry out community service. One day each week, students participate in site visits. Seminars are incorporated into these activities.

In the eight-week summer semester (1 to 3 credits), students carry out internships in various settings. Students work with the program staff to locate internship placements. For information, contact the Urban Semester Program staff in 162 MVR, 255-1846, or the Urban Semester Program in New York City at 212-746-2273.

New York City offers a wide variety of internship settings. Many bilingual and bicultural internship settings are available in Chinese, Spanish, Creole, Russian, Yiddish, and other languages. Examples of internships follow:

Health and medicine—New York Presbyterian Hospital/New York Weill Cornell Medical Center, Queens Medical Center for Women and Children, South Bronx Health Center for Children and Families, Memorial Sloan Kettering Hospital, Hospital for Special Surgery, Montefiore Hospital, Bellevue Hospital, Our Lady of Mercy Hospital

Private and public law—NOW Legal Defense and Education Fund, Agenda for Children Tomorrow, Skadden Arps, Slate, Meagher & Flom, Lawyers for Children, DA's Office, Legal Aid Society, AALDEF, Committee Against Anti-Asian Violence, Center for Immigrant Rights, NAACPLDEF, Dorsey & Whitney

Government and community agencies—Cornell University Cooperative Extension, Senator Charles Schumer's office, NYC Housing Authority, Dept. of Aging, Women's Action Alliance, NYC Commission on the Status of Women, NYC Dept. of Consumer Affairs, The Center for Puerto Rican Studies, Manhattan Borough President's office, Central Park Wildlife Center, Attorney General's office, The Parks Dept., Health Dept.

Wall Street firms and other private businesses—Bloomingdales, Prudential Securities, Merrill Lynch, PricewaterhouseCoopers, Cairns & Associates, Burson Marsteller, Cushman & Wakefield, AIG-AI Underwriters, Salomon Smith Barney, Jane Clark Chermayeff Associates, DDB Needham, KCSA, William M. Mercer Consulting Co., MGM, Madison Square Garden, Gensler Architecture, Niedefhoffer-Henkel Century Group, American Management Association

Private not-for-profit organizations—City Lights Youth, Council on Economic Priorities, Planned Parenthood, Talbot Perkins, FEGS, National Resources Defense Council, Urban Youth Alliance Inc., Phipps Housing, The Door, Covenant House, Global Policy and International Law, UN International Assoc. of Religious Freedom, Mothers and Others for a Livable Planet, UN Child Care Center, WHEDCO, YAI, Families and Work Institute

Private and public schools—Beginning with Children, Banana Kelly High School, East Harlem School at Exodus House, The Hetrick Martin Institute, Nuestros Niños, Theodore Roosevelt High School, The Choir Academy of Harlem, El Puente, Genesis RFK Center, River East School, MS 118, Mott Haven Village

Design and arts organizations—Harlem Textiles Works, TADA!, NY Theater Workshop, Cynthia Rowley, Inc., Perry Ellis International, Museum of African Art, SOHO20 Gallery, Lower East Side Tenement Museum, Tommy Hilfiger, Polo, The Gap, Liz Claiborne

Communications and media—Nickelodeon, *Do Something* magazine, NBC *Dateline*, CNN, CBS News–*48 Hours*, NBC News, ABC *One Life to Live*, MSNBC *The News w/Brian Williams*, *The Village Voice, Good Housekeeping, The New Yorker, Essence,* Children's Television Workshop, *Good Morning America,* MTV, HarperCollins Publishing, *Maxim Magazine*, MTV Online International

OTHER OFF-CAMPUS PROGRAMS

Capital Semester

Richard Canfield, Ph.D., director

Combine a full semester of 15 Cornell credits with a paid internship and a reduction in tuition. Students intern directly for a New York State legislator (Senate or Assembly) in Albany to explore their policy interests in greater depth. Interns attend hearings and legislative sessions, meet with lobbyists and constituents, write reports for legislation and possible publication, and generally help conduct the work of their legislator. All Cornell students, regardless of major, are encouraged to apply. The program is available during the spring semester only, and it is open to sophomores, juniors, and seniors. Interns benefit greatly when subsequently applying for future employment, law school, graduate school, or business school. Information is available from the Career Development Center (162 MVR), and applications and further information can be obtained from Richard Canfield (B09 Savage Hall, RLC5@cornell.edu).

Cornell in Washington

Students take courses from Cornell faculty, conduct individual research projects, and work as externs while taking advantage of the rich resources of the nation's capital. For more information, visit the program office (M101 McGraw Hall).

Courses at Ithaca College and Wells College

Full-time undergraduate students at Cornell may petition to enroll in courses at Ithaca or Wells Colleges. Students pay regular full tuition to Cornell and only special fees to either Ithaca or Wells where applicable. Students are allowed to register for one course per semester and a maximum of 12 credits in four years. Exceptions will be granted to Cornell students enrolled in methods and practice teaching courses at Ithaca and Wells, and those students pursuing a concentration in exercise science through a specially arranged program with Ithaca College.

Cornell students are eligible to register only for Ithaca and Wells College courses that are relevant to their program and that do not duplicate Cornell courses. Ithaca and Wells College credit counts as Cornell credit but not as Human Ecology credit. Students are accepted on a space-available basis. Participation in this program is not guaranteed, and both Ithaca and Wells have the right to accept or reject students for any reason deemed appropriate. The program is available only during the fall and spring semesters. For further information, contact the college registrar (146 MVR, 255-2235).

DOUBLE-REGISTRATION PROGRAMS

Cornell undergraduates from PAM and other fields across the college and campus are eligible to apply to the Sloan Program in their junior year for a five-year accelerated B.S./M.H.A. degree in health administration. In their senior year, these students will take the first-year Sloan courses, which will be counted twice to satisfy both undergraduate as well as graduate requirements. At the end of their senior year, students will graduate with a B.S. degree. Students whose grades are competitive will be notified during the spring semester of their senior year that they are invited to continue for the final year of Sloan as a graduate student. Those students accepted for the five-year program will participate in a health-care administrative internship during the summer after earning their B.S. degree and following the first year of Sloan academic course work. The following graduate year they will complete the second year of required Sloan courses and electives and will earn a master in professional studies, with Cornell certifying completion of the requirements for a graduate degree in health administration.

Students applying to the accelerated B.S./M.H.A. program need to complete the initial application to the Sloan five-year program through PAM in their junior year. In general, at the time of application, most of their undergraduate requirements will have been met. This application must include the GRE general test score, along with recommendations from the faculty advisor and at least one other source, as well as transcripts and the statement of purpose. During their final senior undergraduate year they also will have to submit a formal application to the graduate school. A sample schedule of the two-year curriculum for Sloan can be viewed at www.human.cornell.edu/pam/sloan/current_students/Academics.cfm.

Double-Registration Program for Law

A small number of highly qualified applicants may be admitted to the Cornell Law School after only three years of undergraduate education. The requirements for admission under these circumstances are more stringent than for acceptance after four years of undergraduate study. Applicants must present outstanding qualifications and strong professional motivation. The junior year applicant follows the ordinary application procedures for Cornell Law School admission.

Interested students should contact the Law School director of admissions (Myron Taylor Hall, 255-5141) to discuss the admissions criteria. Because students accepted to this program will be spending their senior year away from Human Ecology, they need to plan ahead to ensure that distribution and major requirements for the B.S. degree will be met. Successful applicants need the approval of the college registrar in Human Ecology.

ACADEMIC ADVISING AND STUDENT SERVICES

Faculty Advisors

Students are assigned a faculty advisor in the department of their major. Students may change advisors by working with the director of undergraduate studies in their major.

Faculty advisors are available to discuss course requirements and sequences, useful electives inside or outside the college, as well as future goals and career opportunities. It is the student's responsibility to make sure that his or her course selections meet graduation requirements for the major, the college, and the university. Directors of undergraduate studies in each department are available to answer questions about the advising system and the undergraduate major. Students who are exploring alternative majors should work closely with college counselors in the Office of Admission, Student, and Career Development.

Office of Admission, Student, and Career Development

The Office of Admission, Student, and Career Development (ASCD) (170–172 MVR) is a center for undergraduate freshman and transfer admission activities; student orientation activities; academic, personal, and career advising; study abroad; and multicultural student programs.

Personal counseling, including exploration of problems or concerns of a personal nature, is available to all students. These ASCD counselors, however, are not psychiatrists or therapists; they are available to help students understand and navigate the Cornell system, and to offer advice, support, assistance, and referral. Discussions are completely confidential. Appointments may be made through the receptionist in ASCD or by calling 255-2532.

In addition, ASCD provides advising support for several student organizations, including Human Ecology Ambassadors, the Mature Students Association, the Association for Students of Color, the Pre-professional Association toward Careers in Health, the Pre-law Undergraduate Society, and the Orientation Committee. Primary responsibilities of the office are listed below:

Academic advisement. This service is provided to all students as an adjunct to faculty advising. Counselors assist in course scheduling, academic planning, selection of a major, graduation requirements, and related issues.

Undeclared majors. Students who have not yet declared a major work closely with counselors in the Office of Student and Career Development, 172 MVR. We encourage students to explore interests by taking courses in several Human Ecology departments.

If you have general ideas about what you would like to study, or what you would like to do after college, then you have probably already narrowed your choice of majors. If you have, then choosing one of those majors as a tentative first home in the college makes a lot of sense.

- You will be assigned a faculty advisor by your department.
- You will receive departmental invitations and communications.
- You may change your major at any time.

Career counseling. Career counseling is designed to help students clarify the relationship between personal skills, abilities, and career goals. Services are offered on an individual or group basis. Counselors assist in identifying career outcomes of the majors, developing networking skills, suggesting course work appropriate to various career goals, and assisting students in their general internship and job searches.

Post-graduate advisement. Material and advice pertaining to graduate and professional schools, graduate entrance examinations, courses of study, and career outcomes is readily available.

Students with disabilities. The College of Human Ecology is committed to assisting students with disabilities; accommodations are available to students who have registered with the Office of Student Disability Services (420 CCC). You are encouraged to contact SDS before your arrival on campus in order to arrange services in time for your first semester. Support within the college is available through the Office of Student and Career Development, 172 MVR.

Financial aid. Students who encounter financial difficulty or anticipate running short of funds may discuss their needs with a counselor. Complete information is available from the Office of Financial Aid, 203 Day Hall.

The Human Ecology Alumni Association Student Grants. Students in the college can apply for these competitive grants to further their academic interests through independent research, community outreach, conference travel, and limited summer study related to career preparation/professional development. Applications are available on the college web site.

Office of the Registrar

The Office of the University Registrar (B7 Day Hall) maintains the official academic records for the university and provides students with their official university transcripts. Additional information is available on the university registrar's web site: http://registrar.sas.cornell.edu. The college registrar (146 MVR) maintains students' official academic records, including the audit of progress toward the degree. The college registrar also provides services such as adding and dropping courses, correcting student records, and approving the transfer of credit from other institutions. Additional information is available on the HE registrar's web site: www.human.cornell.edu/che/Academics/undergraduate/Student_Services/Registrar.

Multicultural Programs

The College of Human Ecology believes that a diverse community enriches the educational process for all members of the college community. Consequently, the college focuses

particular efforts on a broad range of services for students of color. This includes not only recruitment but also services for students already on campus. Additionally, the college collaborates with university and New York State programs to assure that Human Ecology students have access to the vast array of services available here.

The professional staff of Human Ecology's Office of Admission, Student, and Career Development includes a director of multicultural programs who assists in the recruitment, admission, and enrollment of the most qualified and appropriate EOP (a program for New York State residents), African American, Native American, Hispanic American, and Asian American students to the college. All accepted EOP students are invited to a special university-wide pre-freshman summer program that introduces accepted students to the Cornell campus and its classrooms. Services for current students include EOP/COSEP; academic, career, and personal counseling; recommendation letters for employment or graduate schools; and advising and support for student activities and programs.

Human Ecology Peer Partnership Program helps incoming students of color transition to the college and university. Small groups of freshmen, usually about six to eight students, are paired with faculty and upper-class students. They meet weekly for discussions, guidance, and explorations of the Cornell campus and the Ithaca community. For more information, contact Verdene Lee in the Office of Student and Career Development (172 MVR, 255-2532) or Gary Evans (E306 MVR, 255-4775) or Lorraine Maxwell (E310 MVR, 255-1958) in the Department of Design and Environmental Analysis.

ASC (Association for Students of Color). With the motto "Yesterday's vision, today's reality, and tomorrow's hope," the ASC was created to bring together Human Ecology students to provide a supportive foundation for enrollment, retention, graduation, and career placement for students of color. The goals of the ASC are to increase communication between students of color, administration, and faculty; assist in increasing enrollment of students of color in Human Ecology; and assist in increasing the retention of students of color in Human Ecology and in their selected majors. ASC's two committees are recruitment/retention and career development. For more information, contact Verdene Lee (172 MVR, 255-2532).

CSTEP. The Collegiate Science and Technology Entry Program is the New York State program that provides enrichment activities for pre-med and pre-law New York State residents. Services are targeted at populations that are historically underrepresented in scientific, technical, health-related, or licensed professions and/or that are economically disadvantaged and that demonstrate interest in, and potential for, a CSTEP–targeted profession. For more information, contact Verdene Lee in the Office of Student and Career Development (172 MVR, 255-2532).

Multicultural Education

Multicultural education broadens understanding of the world's many different societies as well as the various cultures of this country. Students take courses in the Cornell programs listed below that may be used to meet degree requirements. The college encourages students to incorporate courses from these cultural programs and from study abroad experiences in their degree programs. See information on study abroad opportunities.

Africana Studies and Research Center

American Indian Program

Asian American Studies Program

East Asia Program

Feminist, Gender, and Sexuality Studies Program

Gender and Global Change

Institute for European Studies

Languages and Linguistics

Latin American Studies Program

Latino Studies Program

Peace Studies Program

Program for Contemporary Near Eastern Studies

Program in Jewish Studies

Religious Studies

South Asia Program

Southeast Asia Program

International Students

The International Students and Scholars Office (ISSO, B50 Caldwell Hall, 255-5243) provides a broad range of services to international students. All international students should maintain contact with the ISSO. Counselors in ASCD are also available for assistance.

International students in the College of Human Ecology are encouraged to meet with the college registrar to discuss any questions or concerns that they have about their academic record.

Career Planning, Graduate and Professional School, and Job Search Services

Counseling. The Office of Student and Career Development (172 MVR, 255-2532) provides career counseling and resources to help students explore career options through employment and internship opportunities and professional and graduate school advising. Individual assistance is available as well as group programming, workshops, and panels. Career development is strongly encouraged and supported, including skill development in résumé writing, networking, and interviewing. Students also are instructed in the use and protocol of online résumé submissions and on-campus recruiting. The office works in conjunction with Cornell Career Services (103 Barnes Hall, 255-5221) to facilitate access to university-wide programs.

The Career Exploration Center (CEC, 162 MVR) is a starting point for students looking for career information. Selected resources about careers, career development planning, as well as job search techniques, general directories to begin job or graduate school searches, and information for alumni networking are housed there. Also available are Cornell Career Services handouts, internship search guidelines, graduate and professional school testing booklets and registration packets, study abroad, and Urban and Capital Semester program materials. Computers provide access to web-based information regarding internship and employment opportunities, as well as graduate/professional schools.

The CEC is open weekdays during the academic semester. Student career assistants are available to provide résumé and cover letter critiques, conduct videotaped mock interviews, and help navigate the library resources. Final critiques can be provided by a career counselor once the student review has been completed.

To provide assistance to interested students, career assistants work closely with Urban Semester director Sam Beck and are available daily to answer questions about the program and its application process.

Selected services are listed below. Exploring such services will help students investigate their interests, skills, and values as they relate to career options, provide useful information and tips for a successful summer or full-time job search, and provide access to employment opportunities. In addition, please refer to the college's career development web site: www.human.cornell.edu/che/Academics/Career-Services/index.cfm.

Pre-law or Pre-med. Students who consider themselves pre-law or pre-med are encouraged to join a student group affiliated with ASCD. Those interested in pursuing a legal education can join PLUS (PreLaw Undergraduate Society), which provides information on applying to law school, preparing for the LSAT, and examining career opportunities in law. Students interested in pursuing a health-related career are welcome to join PATCH (Pre-professional Association Toward Careers in Health), which provides opportunities for students to explore various careers in medicine and health care. PATCH provides guidance as students prepare for the graduate or medical school application process, and it offers a mentor program for incoming students.

Extern Program. Students can spend one day to one week over winter break shadowing an alum in a career field of their choice. They observe day-to-day activities, discuss specific jobs and careers, and sometimes obtain limited hands-on experience. This service is available to sophomores, juniors, and seniors and is a valuable networking tool.

FRESH Program. This service is similar to the Extern Program but is available to freshmen only. Students can spend one day to one week over spring break shadowing an alum in a career field of their choice. In addition to career explorations, the Fresh Program provides excellent networking opportunities.

Internship Search and Career Guides. The CEC has handouts, organized by major, that provide a starting point for students to begin their internship search. Also available in the CEC are career guides targeting career exploration, public health, psychology, and social work.

Alumni Career Presentations. Alumni from the college come back to campus throughout

the year to discuss their postgraduate or professional experiences. These meetings are ideal for exploring career outcomes of specific majors.

AlumNet. Students have access to Human Ecology alumni who can provide information on their careers and offer suggestions on a job search in their particular field or location. Students can query alumni on a host of variables and review selected alumni résumés to learn more about specific careers. AlumNet is also an excellent networking tool.

Career Development Workshops. The college hosts several workshops every semester. These workshops develop a strong understanding of the value of a Human Ecology education and are designed to help students market themselves for either summer or full-time job opportunities. Students learn how to know themselves through reflection of skills, interests, abilities, and to conduct effective job searches, write résumés and cover letters, and interview successfully.

CornellCareerNet. Exclusively for Cornell students, CornellCareerNet provides access to many important services offered by Cornell Career Services. These services include a listing of job opportunities, summer opportunities, alumni networking databases, access to on-campus recruiting, employer showcases, and more.

CornellCareerNet On-Campus Recruiting (OCR) This service provides access to on-campus interviews with employers interested specifically in Cornell students. Interviews occur primarily in banking and financial services, retail sales and management, facilities planning and management, and consulting. Please note that on-campus recruiting is only one component of a successful job search. Approximately 70 percent of Cornellians get their jobs through other resources.

New York Recruiting Consortium. Available exclusively to Human Ecology and Arts and Sciences students, the New York Recruiting Consortium is held in New York City over winter break. It offers interviews for full-time employment with employers involved in banking and financial services, retail sales/management, advertising, law, health care, and consulting.

NFP in New York City and NFP in Washington, D.C. Speak with representatives from dozens of New York City or Washington, D.C., not-for-profit/public service agencies about work or internship opportunities in health, education, advocacy, government, and more (held only during the spring semester).

Communications Consortium. Interview with organizations in advertising, public relations, film and radio, and print media. National organizations come to Syracuse, N.Y., to meet with students for individual appointments. During the spring semester, a job fair is held the evening before.

GRADUATION REQUIREMENTS AND POLICIES

It is important for students to track their graduation progress by comparing their current transcript with an appropriate curriculum sheet. Official transcripts may be obtained at the Office of the University Registrar (B07 Day Hall). Curriculum sheets are available in the Human Ecology registrar's office (146 MVR). Students are responsible for planning course selections to ensure that graduation requirements are fulfilled in eight semesters. Transfer students are allowed fewer semesters based on the number of transferable credits granted at admission. Students requiring additional semesters to fulfill their graduation requirements must meet with a Human Ecology counselor (172 MVR) and request to petition for an extension.

Grade Point Average (GPA) Requirement for Graduation

- Students must earn a minimum cumulative GPA of 2.0 (C) or better to graduate.

Cornell Credit Requirements

- To graduate, a student must earn a minimum of 120 academic credits. Physical education credits and "1000" courses do not count toward the 120 required credits.
- Of the 120 credits required to graduate, at least 60 credits must be earned at Cornell University (applicable to transfer students).
- Students who matriculate as freshmen may apply a maximum of 15 non-Cornell credits earned toward the 120 credits required for graduation. These credits include AP, IB, and college credits earned elsewhere. Refer to "Advanced Placement Credit" for full details.
- No *college* credit earned before matriculation and used to meet Cornell's minimum admission requirements may be counted in the 120 credits required for graduation. This policy does not apply to transfer students.
- *Courses taught by a college in the high school setting or counted toward high school graduation are not allowed to count for either credits or fulfillment of requirements (i.e., Syracuse Project Advance).*
- Cornell extramural credit (defined below) is limited to 15 credits toward the 120 required.
- Strict limitations exist on the number of credits that can be applied toward the 120-credit minimum for special studies courses (4000, 4010, 4020), for 4030 courses, and for courses taken with an optional S–U grade. Details follow.

Human Ecology Credit Requirements

- The college divides the 120 minimum required academic credits into four general categories. (*Students should refer to curriculum sheets for their major for specific details on course selections. These sheets are available in the Office of the Registrar [146 MVR] and in the Office of Admission, Student, and Career Development [172 MVR] as well as on the college web site at www.human.cornell.edu.)*

  a. Category I—College distribution requirements

     Natural sciences

     Social sciences

     First-year writing seminars

     Humanities

     Quantitative and analytical courses (math and statistics)

  b. Category II—Requirements for a major

  c. Category III—Elective credits

  d. Category IV—Physical education

These categories are detailed below.

- **Students must complete 43 Human Ecology (HE) credits from Categories I, II, and III**. *Additional course-specific rules are listed below.*

  S–U grading rules for this requirement are as follows:

  1. If a course is a requirement in Category I or II, the course may *not* be taken for an S–U grade (unless it is the only grade option offered for the course).
  2. Courses used to count toward Category III (electives) that are taken for an S–U grade *may* also count toward the 43-credit requirement.
  3. Students should refer to the section on S–U grading rules for full S–U grading details.

- **Students must complete 9 Human Ecology (HE) credits from outside their major department from Categories I, II, or III.** Note: Biology and society majors are exempt from this requirement. A maximum of 3 credits from the 4000–4020 special-studies series may be applied to this requirement. *Other course-specific rules for this requirement are listed below.*

  S–U grading rules for this requirement are as follows:

  1. If a course counting toward the 9-credit outside-the-major requirement is also a requirement in Category I or II, the course may *not* be taken for an S–U grade unless it is the only grade option offered for the course.
  2. Courses used to count toward Category III (electives) that are taken for an S–U grade may also count toward the 9-credit outside-the-major requirement.
  3. Students should refer to the section on S–U grading rules for full S–U grading details.

Course-specific rules that apply to *both* the 43 Human Ecology credit requirement and the 9 Human Ecology credit outside-the-major requirement:

1. Human Ecology (prefix "HE") courses below the 3000 level (e.g., HE 1100 and 1200) do not count toward either the 43-credit requirement or the 9-credit outside-the-major requirement. These HE–prefix courses that are below 3000 level may be used as elective credit.
2. ECON 1110 and 1120 are considered Human Ecology credit courses and may be used to fulfill Human Ecology's 43- and 9-credit outside-the-major requirements. If either or both courses are taken to fulfill a Category I or II requirement, they must be taken for a letter grade.
3. BSOC courses do not count as Human Ecology credit.

4. Experiential credit is applied to Human Ecology's 43- and 9-credit outside-the-major requirements as follows:

   a. Urban Semester (HE 4700, 4800, 4900/4950). Students in all Human Ecology majors earn:

      • 15 Human Ecology credits and 8 credits toward the 9-credit outside-the-major requirement.

   b. Capital Semester (HE 3920). All students earn:

      • 15 Human Ecology credits and 8 credits toward the 9-credit outside-the-major requirement.

   c. Cornell in Washington (PAM 4060). For this entire semester, PAM majors earn:

      • 8 credits toward the 43-credit requirement, which also count as 8 PAM credits.

      Non–PAM majors earn:

      • 8 credits toward the 43-credit requirement, which also count as 8 credits toward the 9-credit outside-the-major requirement. The remainder of the credits counts as elective credit.

Elective Credits

Students have individual objectives in choosing courses beyond the minimum requirements of the major. The university is diverse; the departments, centers, and special programs numerous; and the fields of study almost unlimited. Counselors and faculty advisors are available to discuss which courses may interest students and best round out their education.

Students should consult the index in this catalog to learn where different subjects are taught in the university. Some subjects are taught in more than one division.

Elective credits can be earned in the endowed and contract colleges of Cornell.

Physical Education Requirements for Graduation

1. Students must earn 2 credits of physical education within their first two semesters. These 2 credits do not count as part of the 60 Cornell credits, or as part of the 120 total credits required for a degree, or toward full-time status. Students who matriculate at Cornell with 12 or more credits must complete only 1 credit of physical education. Students who transfer more than 25 credits (excluding AP credits) are not required to take physical education at Cornell, regardless of whether they took physical education at their previous college.
2. Students must pass the university's swim test. Students who transfer more than 25 credits (excluding AP credits) are exempt. Refer to "University Requirements for Graduation—Physical Education—Swim Test" in this catalog for specifics.

Minimum Semester Requirements

1. Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester, and at least 5 credits of Human Ecology courses must be taken in the freshman and 7 credits in the sophomore years (ECON 1110 and 1120 may be used to fulfill this requirement).
2. Students must carry 12 credits each semester, excluding physical education, to be matriculated as full-time students. Mature students must carry a minimum of 6 credits each semester (see "Mature Student Guidelines" for details).
3. In special cases, a student may petition to carry between 8 and 12 credits. Forms for petitioning this exception and advice on how to proceed are available in the Office of Admission, Student, and Career Development (172 MVR).

Special Studies

- Students may use only 12 credits of 4000, 4010, 4020, or 4030 courses toward graduation.
- Additional credits of 4000, 4010, 4020, or 4030 courses can be taken but will not be applied toward graduation.

"00" Courses

- "1000" courses do not count toward graduation requirements but do count toward full-time semester status.

Requirements for Majors

- Students must fulfill the requirements specified for a major that are in effect at the time of their matriculation or thereafter. The requirements are detailed in curriculum sheets that are maintained for each academic year.

S–U Grade Options

- The S–U grading option may *not* be used for courses in category I or required courses in category II unless it is the only grade option offered for those courses. S–U grades *may* be used for the 9 credits of Human Ecology course work outside of one's major and for electives in category III.
- Students may apply no more than 12 credits of S–U toward the 120 credits required for graduation. If a required course is offered only S–U, it will not count toward this limit. Also, Honors Research 4990 taken S–U does not count against the 12 maximum limit. Students may take more S–U courses if they choose, but the additional credit may not be applied toward graduation.

First-Year Writing Seminars

In each of their first two semesters of matriculation at the College of Human Ecology, students are required to take a Knight Program First-Year Writing Seminar. This policy also applies to transfer students. One or more of the seminars may be waived for transfer students if the college registrar grants credit for equivalent course work taken before matriculation at Cornell.

Those who do not fulfill this requirement on time will be referred to the Committee on Academic Status. Refer to "Criteria for Good Standing" for specifics on warning statuses that the committee applies to students who do not complete this requirement.

First-year writing seminars must be taken at Cornell and **may not be taken in absentia**. Students who receive a score of 5 on either the English Literature and Composition or English Language and Composition Advanced Placement (AP) exams can be exempt from *one semester* of their first-year writing seminar requirements. No other AP scores will allow a student this exemption (even if a lower score allows the student to use the course as elective credit toward graduation.) Students should be aware that the add/drop period for first-year writing seminars may be shorter in duration than the add/drop period for most Cornell classes.

Wells, Ithaca College, and Study Abroad Credits

Any credits earned with the Wells or Ithaca College exchange program are considered Cornell credits for the purpose of fulfilling the 60 Cornell credit graduation requirement. They may not be used for Human Ecology credit. Study abroad courses may also count as Cornell credit (but not for Human Ecology credit). Refer to "Cornell Credit Requirements" for details on how many advanced placement (AP) credits can be applied toward the 120 credits needed for graduation.

Advanced Placement Credit

Students can earn advanced placement credit from one of the following:

1. The requisite score on a departmental examination at Cornell (usually given during orientation week) or on a College Entrance Examination Board (CEEB) achievement test. The requisite scores for the CEEB exams are determined by the relevant department at Cornell, vary by subject, and are listed in the beginning of this catalog. College-specific rules apply toward many AP courses such as biology, English literature, English composition, and statistics.
2. A regular course taught at an accredited college to college students and approved by the relevant department at Cornell. Some departments have delegated the review of courses to college staff according to guidelines they have formulated. Some departments review each request individually. Some departments accept credit from virtually all accredited colleges; some do not.
3. Credit from the International Baccalaureates (IB) is evaluated individually.
4. Refer to "Cornell Credit Requirements" for details on how many Advanced Placement (AP) credits can be applied toward the 120 credits needed for graduation.

Note: Cornell does not accept credit for courses sponsored by colleges but taught in high schools to high school students, at colleges if enrollment is targeted at high school students, or if the course was used toward high school credit. This is true even if the college provides a transcript of such work. These courses also may not be used to fulfill college requirements. Students who have taken such courses may, however, take the appropriate CEEB test to qualify for credit as in paragraph 1 above. For further information and limitations on Advanced Placement credit, see the front pages of this catalog.

Foreign Language Study and Placement

Students who studied a foreign language before coming to Cornell and who want to continue must take either the CEEB test in that language or a Cornell departmental language placement test. The latter is given during orientation week in September and again in December, January, and May. Human Ecology students who plan to work with non-English–speaking people in this country or abroad often find it necessary to be proficient in another language. Many study abroad programs in non–English-speaking countries require the equivalent of two years of college-level language study.

Extramural Credit

Extramural credit is administered by the Office of Continuing Education and Summer Sessions (B20 Day Hall, 255-4987). Extramural credit is charged by the credit hour at the endowed tuition rate. Students may count only 15 credits of extramural credit toward their degree requirements. A student may enroll for extramural credit during the fall or spring semester only if he or she is not registered in the College of Human Ecology. For example, some students enroll for extramural credit before matriculating at Cornell.

An exception to this rule is credit earned in the Ithaca College or Wells College exchange programs. Students enrolled in these programs simultaneously maintain their status as students registered in the College of Human Ecology.

Humanities

Only certain classes will count for Category I, Humanities. To determine eligibility the college uses the following definition: "The humanities include the study of literature, history (including art and design history), philosophy, religion, and archaeology. Critical, historical, and theoretical studies of the arts and design are considered humanities. Languages and creative or performing arts such as the writing of fiction or poetry, painting, sculpting, designing, composing or performing music, acting, directing, and dance are not considered humanities." Additionally, social science courses such as sociology, government, anthropology, and psychology are not considered humanities.

Specifically, courses in the following list will count as humanities:

Africana Studies (literature and history)

Archaeology

Asian American Studies

Asian and Near Eastern Studies (literature and history)

Classics (literature and history)

Comparative Literature

Development Sociology 1750, 3180

English (literature only)

Fiber Science & Apparel Design 1250

History

History of Art/History of Architecture

Landscape Architecture 2820

Music and Theatre Arts (theory, literature, and history only)

Natural Resources 3320

Philosophy

Policy Analysis and Management 5310, 5340, 5520

Religious Studies

Science and Technology Studies 2050, 2060, 2330, 2500, 2810, 2820, 2860, 2920, 3580, 3600, 3890, 4330, 4440, 4470, 4720, 4810, 4900

Math Requirement

Students may meet the college level requirement in *one* of the following ways.

Any CORNELL math course except MATH 1000 (BTRY 1150 may be used)

OR

Any CORNELL statistics course

OR

Score of 3 or higher on the AP Calculus BC exam. (Other AP math credit could be used toward graduation credit but may not be used to meet the math requirement)

Notes:

- Departments may impose additional requirements for majors or specify courses within this requirement.
- Students entering as transfers may apply to have their statistics or math courses approved, but pre-calculus courses will no longer meet this requirement or receive graduation credit.

PROCEDURES

Registration and Course Enrollment

Registration Requirements

University registration is the official recognition of a student's relationship with the university and is the basic authorization for a student's access to services and education. Completion of registration is essential to enable the university to plan for and provide services and education, guided by the highest standards for efficiency and safety. Unauthorized, unregistered persons who use university services and attend classes have the potential to use university resources inappropriately and to displace properly registered students. In addition, the university assumes certain legal responsibilities for persons who participate as students in the university environment. For example, policy states that New York State health requirements must be satisfied. Because these requirements are intended to safeguard the public health of students, the university has a responsibility to enforce the state regulations through registration procedures.

The policy on university registration is intended to describe clearly the meaning of and the procedures for registration so that students can complete the process efficiently and be assured of official recognition as registered students. With the clear communication of the steps for registration, it is hoped that compliance will occur with a minimum of difficulty.

To become a registered student at Cornell University, a person must complete course enrollment according to individual college requirements, settle all financial accounts including current semester tuition, satisfy New York State health requirements, and have no holds from the college, the Office of the Judicial Administrator, Gannett Health Center, or the Bursar's office.

Individuals must become registered students by the end of the third week of the semester. Cornell University does not allow persons who are not registered with the university in a timely manner to attend classes. The university reserves the right to require unauthorized, unregistered persons who attend classes or in other ways seek to exercise student privileges to leave the university premises.

Verification of Registration

Many insurance companies or scholarship funds require verification of full-time registration at Cornell. Should students need such verification, they should use the official university verification service at http://certification.cornell.edu or request an official letter from the Office of the University Registrar (B-7 Day Hall). Students who need letters of good standing should contact the Human Ecology registrar's office (146 MVR).

Bursar Bill

A bursar bill is sent to each student over the summer and winter breaks; it summarizes what is owed to the university. The bursar bill can also be viewed through *Student Center*. Any questions regarding the bursar bill can be directed to the bursar's office (260 Day Hall, 255-2336). Initial New York State residency eligibility is determined during the admissions process, but the bursar's office will handle any request for a status change after matriculation.

Late University Registration

A student clearing his or her financial obligations after the deadline date on the bursar's bill is considered late. **Late registrants are assessed a finance charge on the bursar's bill starting from the date the bill is due**. According to university policy, all students must be registered before the end of the third week of classes. If for any reason a student registers after that time, the Bursar's office will charge a late fee. **Students who fail to register by the third week of the semester may be withdrawn from the university. Human Ecology students who do not arrange payment agreements satisfactory to the university bursar by the last day of classes for a semester will be withdrawn from the university. Furthermore, credit for any classes attended for the semester will not be awarded regardless of the letter grade received for a class. Should withdrawn students wish to return, they must reapply through the college admissions office.**

Proration of Tuition

Except for mature students, it is seldom possible to have tuition prorated if a student carries fewer than 12 credits during a semester. See the college registrar (146 MVR) for more information. Students of mature status may carry 6 to 11 credits but must request that their tuition be prorated. Prorated tuition will be considered only for requests of between 3 and 10 credits. All requests should be made to the college registrar (146 MVR) by the end of the pre-enrollment period in the semester before the term in which proration is requested.

Course Enrollment

Initiating the Process

"CoursEnroll" selections are only "requests" for seats in classes. Between the end of the course enrollment period and the beginning of the next semester, course requests are evaluated by the offering college department. Students can determine if their requests have been successful when final schedules are published before the add/drop period. Students are expected to make course requests for the subsequent semester during a specified time in the current semester. Those dates are advertised publicly and are available on the university registrar's web site (http://registrar.sas.cornell.edu). "CoursEnroll" takes place electronically, using software available through *Student Center*. During this time, each student must meet with his or her faculty advisor to discuss academic plans.

Information on courses is readily available in this catalog and in the *Course and Time Roster* for each semester. Both of these publications can be accessed on the web through CUInfo.

Incoming students will receive tentative schedules upon their arrival to campus, and will meet with faculty advisors during the orientation period.

Course Loads

Full-time matriculated students must carry at least 12 credits (exclusive of physical education courses) to maintain full-time status. Refer to the preceding section, "Minimum Semester Requirements," for details. The normal course load in the college ranges from 12 to 18 credits. Students who wish to enroll in more than 18 credits per semester must petition. They must have completed at least six semesters at Cornell with a GPA of 3.30. A maximum of 22 credits are allowed by petition. Students may not withdraw from courses after the seventh week of classes without petitioning and by substantiating extenuating circumstances. Students should avoid the need to drop courses by taking on a reasonable workload and using the drop period to make changes in their program.

Late Course Enrollment

Students who do not complete course enrollment during the CoursEnroll period usually must wait until the beginning of the next semester's add/drop period to enroll. Extensions are rarely granted and usually only for documented illness.

Students who do not meet the deadline for any reason should see the college registrar in 146 MVR as soon as possible. The college registrar can explain available options and course enrollment procedures under such circumstances.

Note: Students can review their course schedule via computer using *Student Center*. Students are responsible for checking their course schedule for accuracy of course numbers, credit hours, grade options, and other data. Errors must be corrected immediately. Procedures for correcting enrollment errors as well as for making any other changes are described in the following section.

Course Enrollment Changes

It is to the student's advantage to make any necessary course enrollment changes as early in the semester as possible. Adding new courses early makes it easier for the student to keep up with course work. Dropping a course early makes room for other students who may need it for their academic programs.

Ideally, students evaluate their course load carefully at the beginning of the semester. If, in the first week or two, the instructors do not discuss the amount of material to be covered and the extent of student assignments, students need to ask about course requirements.

Deadlines for Add/Drop and Grade Option Changes

Note: Brief add/drop periods exist for first-year writing seminars and half-semester courses.

1. During the first three weeks of the semester, courses may be added, dropped, or the grade option changed. Special status courses (4000, 4010, 4020) may be added through the seventh week of classes. 4030 Teaching Apprentice courses must be added during the first three weeks of the semester.
2. From the fourth through the seventh week of the semester, courses may be dropped. **Grade option changes may not be made at this point regardless of instructor's permission.**
3. After the seventh week of the semester, any requests for course changes must be made through the petition process. Students should request an appointment with an Admission, Career, and Student Development counselor in 172 MVR to initiate the process.
4. After the seventh week of the semester, any student granted permission to drop a course after petitioning will automatically receive a grade of W (Withdrawn), and the course and grade will remain on the official transcript even if repeated in a later semester. The deadline to petition to drop a course with a "W" is the end of the 12th week.

Deadlines for Half-Semester Courses

Students may drop half-semester courses within the first three-and-one-half weeks of the course. Students may add a course after the first week of classes only with the permission of the instructor. After the first three-and-one-half weeks, students must petition to drop the course.

Time and Place for Add/Drop and Grade Option Changes

All students may adjust their schedules and grading options during the first three weeks of each semester. **To make course changes after the seventh week of the semester, a student must file a general petition form** (see "Petition Process"). Students are expected to attend classes and to do assigned work until the petition has been formally approved or denied.

Permission of Instructor

Certain courses may be taken only with the permission of the instructor as indicated in this catalog or on the official course description on the web. Undergraduates must obtain permission of the instructor to take any graduate course. Students must request the instructor's permission during the course enrollment period by placing their name on a list maintained by the departmental advising assistant.

Students interested in taking a course in the Department of Art in the College of Architecture, Art, and Planning are required to register with the departmental secretary (100 Olive Tjaden Hall) before enrolling in the course. Seniors who want to take an elective course in the Johnson Graduate School of Management are required to obtain permission of the instructor on a course authorization form that the student then files with that school's registrar in Sage Hall.

Course Enrollment while Studying Abroad

Students who plan to study abroad have several options available to enroll for their returning semester at Cornell. Students can consult with their faculty advisor before departure to consider the schedule of classes that they will take upon their return to campus. Once abroad, the student can use the web to access *Courses of Study* and the *Course and Time Roster* for the coming semester. The roster is available on the web in approximately the first week of October and the first week of March. Using these resources, the student can e-mail the course requests to the student's faculty advisor for approval; the faculty advisor can then e-mail them to the college registrar. A student who does not have access to the Internet while abroad can wait for the *Course and Time Roster* to arrive via airmail from the Cornell Abroad office. The student can then e-mail, fax, or mail the course requests to their faculty advisor and ask the faculty advisor to submit the course requests to the college registrar. The *Course and Time Roster* becomes available only the day that pre-enrollment begins; thus, students who depend on receiving the mailed copy will experience some delay in submitting their course requests. Requests must be submitted within the published deadlines.

Oversubscribed Courses

Enrollment in many human ecology courses is limited. When a course is overenrolled, students are generally assigned on the basis of seniority or by criteria defined for each course as listed in this book. Students' professional goals may be considered. Those students not admitted to a course may be placed on a waiting list maintained by the professor or the department offering the course. Course instructors are responsible for determining the criteria to fill their classes from waiting lists. Waiting lists are maintained only for the first three weeks of each semester.

Limited-Enrollment Classes

Students who do not attend the first two class sessions of courses with limited enrollment may be dropped from the course list. Students can avoid being dropped from a class by notifying the instructor that unavoidable circumstances have prevented their attendance.

Cross-Listed Courses

To apply a cross-listed course to graduation requirements, students must enroll in the department for which they need the credits. If changes in department designations need to be made, this must be done during the official course add period for the semester. To do so, students must complete a special form, which can be obtained in the registrar's office in 146 MVR.

Courses with Duplicate Content

Students should scrutinize course descriptions for details about other Cornell courses with duplicate content that would preclude a student from receiving full credit for duplicate courses. For example, students may not receive 6 credits toward graduation requirements if they take DSOC 1010 and SOC 1101. Because both are introduction to sociology courses, only 3 credits would be allowed. To aid students in this evaluation, the college maintains a partial list (those that are commonly required in Human Ecology curricula) of Cornell courses that have duplicate content.

Special Studies Courses

Each department in the College of Human Ecology (DEA, FSAD, HD, NS, and PAM) offers special studies courses that provide opportunities for students to do independent work not available in regular courses. One of those courses, designated 3000 Special Studies for Undergraduates, is intended primarily for students who have transferred from another institution and need to make up certain course work.

The other special studies courses are 4000 Directed Readings; 4010 Empirical Research; and 4020 Supervised Fieldwork. Juniors and seniors normally take those courses, and a faculty member in the department in which the course is offered supervises work on an individual basis. It is important for students to use the appropriate course number (3000, 4000, 4010, or 4020) for a special project.

To register for a special studies course, a student obtains a special studies form from the departmental office where he or she plans to take the course. The student discusses the proposed course with the faculty member under whose supervision the study would be done and then prepares a plan of work. If the faculty member agrees to supervise the study, the student completes a special studies form and obtains signatures from the instructor, faculty advisor, and department chair before submitting the form to the college registrar's office (146 MVR). Special studies forms are available in 146 MVR or in departmental offices.

Semester credits for special studies courses are determined by the number of contact hours the student has with the supervising faculty member (or a person designated by the faculty member). To earn 1 credit, a student must have the equivalent of three to four hours of contact time per week for 15 weeks (a total of 45 contact hours). For additional credit, multiply the number of credits to be earned by 45 to determine the number of contact hours needed for the course. **Strict limitations exist on the number of special studies credits that can apply toward graduation and how these credits may be applied toward Category II requirements in the major. Refer to "Human Ecology Credit Requirements" for details**. To register in a special studies course taught in a department outside the college, follow the procedures established by that department.

Changes in Status

General Petition Process

The petition process permits students to request exceptions to existing regulations. Petitions are considered individually, weighing the unique situation of the petitioning student with the intent of college and university regulations. In most cases, extenuating circumstances are needed for a petition to be approved if it involves waiving a deadline. These are situations beyond a student's control, such as a documented medical emergency.

Students can avoid the necessity to petition by carefully observing the deadlines that affect their academic program. See "Course Enrollment Changes" above for some of the important deadlines. If unsure of a deadline, check with a counselor in the Office of Student and Career Development (172 MVR) or with the staff in the college registrar's office (146 MVR).

A general petition may be needed to carry fewer than 12 credits, withdraw from a class after the seventh-week deadline, add a course after the third-week deadline, change a grade option after the third-week deadline, be exempt from one or more of the college's graduation requirements, substitute a required course in one's major with another course, or stay an additional semester to complete the graduation requirements.

Although many kinds of requests can be petitioned in the college, options other than petitioning may be preferable in some cases. To explore whether a petition is appropriate, the student may discuss the situation with a college counselor or the college registrar.

If a student decides to submit a general petition, the form is available in the registrar's office (146 MVR) and in the Office of Student and Career Development (172 MVR) or on the web at www.human.cornell.edu/che/Academics/Undergraduate/Student_Services/Registrar/Forms-and-Petitions.cfm. After completing the form, meeting with a counselor in 172 MVR, and obtaining the required signatures, the student must turn the form in to the registrar. Once a decision is made, a letter is placed in the student's college mail folder indicating approval or denial of the petition.

Students may appeal the college registrar's decision to the Committee on Academic Status. A member of the counseling staff can guide a student through this process.

In Absentia Study

Under certain conditions, credit toward a Cornell degree may be given for in absentia study, that is, study done at an accredited institution away from Cornell after the student matriculates in the College of Human Ecology. In absentia study can be done during any semester: fall, winter, spring, or summer. First-year writing seminars may not be taken in absentia.

To be eligible for in absentia study, a student must be in good academic standing and must receive permission in advance from the college registrar. A student not in good standing may study in absentia but will not receive transcript credit until the Committee on Academic Status has returned the student to good standing. Students not in good academic standing who wish to finish their degree in absentia must seek pre-approval from the college's Committee on Academic Status via the general petition process. In some cases, students may petition for in absentia credit after the work has been completed, but there is no guarantee that such credit will be awarded without advance approval.

In absentia petition forms are available in the Human Ecology registrar's office (146 MVR) or on the web at www.human.cornell.edu/che/Academics/Undergraduate/Student_Services/Registrar/Forms-and-Petitions.cfm. The student submits the form to the Human Ecology registrar's office (146 MVR). In absentia study during the fall or spring semester carries a nominal administrative fee. (Contact the Bursar's office, 260 Day Hall, for the current amount.) Students will receive a letter in their college mail folder from the college registrar notifying them of the petition decision.

Note: Students seeking pre-approval for in absentia course work should do so well in advance as turnaround time for the approval process can be variable.

A student may take up to 15 credits in absentia as long as the courses do not duplicate courses already taken and the in absentia courses are applicable to the requirements of the college. The combined number of AP credits and in absentia credits applied to graduation requirements may not exceed 15 credits. Students who study abroad during the summer or winter term are limited to a maximum of 9 in absentia credits. Study abroad during the fall or spring semester must be done through the Study Abroad office and is not considered in absentia study. **Students studying while on a leave of absence during the spring or fall semesters may not receive credit for nondomestic campus programs.**

On the following rare occasions a student's petition for more than 15 credits in absentia may be allowed: (1) the work taken represents a special educational opportunity not available at Cornell, (2) it relates to the student's particular professional goals, and (3) those goals are consistent with the focus of the college. The in absentia petition form is used to request more than 15 credits in absentia. Wells and Ithaca College credit are not considered in absentia credit and are not included in the 15-credit limit.

The college registrar requests approval from the appropriate department if a student wants to apply in absentia credit to requirements in his or her major. Students seeking in absentia credit for a modern foreign language in which they have done work must obtain the approval of the appropriate language department (College of Arts and Sciences). The department will recommend the number of credits the student should receive and may require the student to take a placement test after returning to Cornell.

The student is responsible for having the registrar of the institution where in absentia study is done send transcripts of grades directly to the Human Ecology registrar's office (146 MVR). Only then will credit be officially assessed and applied to the Cornell degree. Credit for in absentia study will be granted *only* for those courses with grades of C– or better. Courses may not be taken for S–U grades unless it is the only grade option offered. In absentia courses appear on the Cornell University transcript, but the grades are not calculated in the student's GPA.

A student who holds a Regents' or Children of Deceased or Disabled Veterans Scholarship may claim that scholarship for study in absentia if the study is done in a college in New York

State and if it is for a maximum of 15 credits acceptable to the College of Human Ecology.

The rules regarding study in absentia apply to transfer students with the additional stipulation that at least 60 credits must be taken at Cornell. At least 43 of the 60 credits must be in the College of Human Ecology at Cornell unless the student has transferred equivalent human ecology credit. (No more than 20 credits of equivalent credit may be applied to the 43 credits required in human ecology course work.)

Leaves of Absence

A student may request a leave of absence before the beginning of the semester or during the first seven weeks of the semester for which a leave is sought. A leave may be extended for a second semester by making a written request to the Office of Student and Career Development (172 MVR). Note: In absentia study status and leave of absence status are not the same; however, students may petition to earn credits with either status. Students on leave must notify the college registrar (146 MVR), in writing, of their intention to return to campus at least one month before the beginning of the semester. **Those whose leave period has expired will be withdrawn from the college after the third week of the semester they were due back.**

Students considering a leave of absence should discuss their plans with a counselor in the Office of Student and Career Development. The counselor can supply the necessary forms for the student to complete and file with the Human Ecology registrar's office (146 MVR). Leaves initiated after instruction begins will be charged a percentage of the semester tuition. (Refer to "Bursar Information" in this catalog for a billing schedule.)

Requests for a leave of absence received after the first seven weeks of the semester, or requests for a leave of absence from students who have already had two semesters' leave of absence, will be referred for action to the Committee on Academic Status. The committee may grant or deny such requests, attaching conditions to the leave as it deems necessary. Leaves of absence after the first seven weeks are generally granted only when there are compelling reasons why a student is unable to complete the semester, such as extended illness.

A student who requests a leave of absence after the first seven weeks is advised to attend classes until action is taken on the petition. A student whose petition for a leave of absence is denied may choose to withdraw or to complete the semester. If the petition for leave is approved, the student's courses will remain on the transcript with W grades.

The academic records of all students who are granted a leave of absence are subject to review, and the Committee on Academic Status may request grades and other information from faculty members to determine whether the student should return under warning or severe warning or in good academic standing.

Under certain documented medical circumstances a student may be granted a **health leave of absence**. Health leaves are initiated by the student with Gannett Health Center. If Gannett Health Center recommends a health leave for the student, the college registrar may grant the leave. A health leave is for an indeterminate period of time not to exceed five years. Students who are granted a health leave of absence should maintain contact with a counselor in the Office of Student and Career Development (172 MVR, 255-2532) to arrange their return to campus. The counselor will advise the student on procedures to obtain a recommendation from Gannett Health Center to the college registrar for the student's return. Students should plan sufficiently in advance to assure time for Gannett Health Center and the college registrar to consider their request.

Withdrawal

A withdrawal is a termination of student status at the university. Students may withdraw voluntarily at any time by notifying a counselor in the Office of Admission, Student, and Career Development and filing a written notice of withdrawal in the Human Ecology registrar's office. A student considering such an action is urged to first discuss plans with a counselor in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

In some instances, a student may be given a withdrawal by the college registrar. Students who leave the college without an approved leave of absence, or do not return after the leave has expired, will be given a withdrawal after the seventh week of the semester in which they fail to register.

A student who has withdrawn from the college or who has been given a withdrawal by the college registrar and who wishes to return at a later date must reapply through the Office of Admission for consideration along with all other applicants for admission. If the student was in academic difficulty at the time of the withdrawal, the request for readmission will be referred to the Committee on Academic Status (CAS) for consideration, and that committee may stipulate criteria under which the student may be readmitted to the college.

GRADES AND EXAMINATIONS

Grade Definitions and Equivalents

The official university grading system uses a system of letter grades ranging from A+ to D–, with F denoting failure. An INC grade is given for incomplete work and R is given at the end of the first semester of a two-semester course. If a student is given permission to withdraw from a course after the seventh week of the semester a "W" is automatically assigned. Students can view their grades on *Student Center* after the semester has ended. See "Grading Guidelines" for more information on the official university grading policies.

To compute a semester grade point average (GPA), first add up the products (credit hours X grade quality points) and divide by the total credit hours taken. Grades of INC, R, S, SX, U, UX, and W should not be included in any GPA calculations. A grade of F has no quality points, but the credits are counted, thereby lowering the average. A cumulative GPA is simply the sum of all semester products divided by all credits taken. Refer to "Repeating Courses" for details on how GPA is affected if a student repeats a course. For further help on calculating a GPA ask at the college registrar's office (146 MVR).

These are the quality point equivalents:

A+ = 4.3	C+ = 2.3
A = 4.0	C = 2.0
A– = 3.7	C– = 1.7
B+ = 3.3	D+ = 1.3
B = 3.0	D = 1.0
B– = 2.7	D– = 0.7
	F = 0.0

Repeating Courses

Students are allowed to register a second time for a course they have already passed or in which they received an F. If a student has previously passed a course he or she is taking a second time, the second registration will not count toward the degree requirements, and the grade received will not be included in the cumulative GPA.

If a student enrolls in a course in which he or she previously received an F, the credits from the second registration will count toward the graduation requirements and the grade will be included in the cumulative GPA. The F will also remain on the record and will be included in the GPA.

S–U Grades

Some courses in the college and in other academic units at Cornell are offered on an S–U basis (see course descriptions in this book and on the Cornell web site). Courses listed as SX–UX are available only on an S–U basis and may not be taken for a letter grade. University regulations concerning the S–U system require that a grade of S be given for work equivalent to a C– or better; for work below that level, a U must be given. **No grade point assignment is given to a grade of S, and S or U grades are not included in the computation of semester or cumulative averages**. A course in which a student receives a grade of S is, however, counted for credit. No credit is received for a U. Both the S and U grades appear on a student's record. A student who is attempting to qualify for the semester's Dean's List must take at least 12 credits of course work graded non–S–U. See "Awards and Honors" for more details about the Dean's List.

No more than 12 S–U credits will count toward a student's 120-credit graduation requirement. However, a student may take more than one S–U course in any one semester. **S–U courses may be taken only as electives or in the 9 credits required in the college outside the major** unless the requirements for a specific major indicate otherwise. Freshmen enrolled in ENGL 1370 and 1380 (offered for S–U grades only) are permitted to apply those courses to the first-year writing seminar requirement. If a **required** course is offered only S–U, it will not count toward the 12-credit limit.

To take a course for an S–U grade, a student must check the course description to make sure that the course is offered on the S–U basis; then either sign up for S–U credit during course enrollment, or obtain and file an add/drop form in the Human Ecology registrar's office before the end of the third week of the semester. After the third week of the semester, students cannot change grade options.

Grades of Incomplete

A grade of incomplete is given when a student does not complete the work for a course on time but when, in the instructor's judgment, there was a valid reason. A student with such a reason should discuss the matter with the instructor and request a grade of incomplete. Students are at risk of going under the minimum semester requirement if an INC grade in a course puts the total number of credit hours under 12 for the semester. For more information, refer to "Minimum Semester Requirements."

A grade of incomplete may remain on a student's official transcript for a maximum of two semesters and one summer after the grade is given, or until the awarding of a degree, whichever is the shorter period of time. The instructor has the option of setting a shorter time limit for completing the course work.

If the work is completed within the designated time period, the grade of incomplete will be changed to a regular grade on the student's official transcript. **If the work is not completed within the designated time period, the grade of incomplete automatically will be converted to an F**.

When a student wants to receive a grade of incomplete, the student should arrange a conference with the instructor (preferably before classes end and the study period begins) to work out the agreement. A form, called Explanation for Reporting a Final Grade of F or Incomplete, which must be signed by both the instructor and the student, needs to be submitted by the instructor to the Human Ecology registrar's office. This form is submitted with the final grade sheets whenever a grade of incomplete is given. This form is for the student's protection, particularly in the event that a faculty member with whom a course is being completed leaves campus without leaving a record of the work completed in the course. If circumstances prevent a student from being present to consult the instructor, the instructor may, if requested by the student, initiate the process by filling out and signing the form without the student's signature and turning the form in to the Human Ecology registrar's office with the grade sheet. Before a student will be allowed to register for succeeding semesters, he or she must go to the Human Ecology registrar's office to fill out and sign the remainder of the form.

If the work is completed satisfactorily within the required time, the course appears on the student's official transcript with an asterisk adjacent to the final grade received for the semester in which the student was registered for the course. A student who completes the work in the required time and expects to receive a grade must take the responsibility for checking with the Human Ecology registrar's office (about two weeks after the work has been handed in) to make sure that the grade has been received. Any questions should be discussed with the course instructor.

Grade Disputes

Students who find themselves in disagreement with an instructor over grades have several options:

1. Meet with the instructor and try to resolve the dispute.
2. Meet with the chair of the department in which the instructor has his or her appointment.
3. Meet with the associate dean for undergraduate studies of the college in which the course was taught.
4. Meet with the university ombudsman (118 Stimson Hall, 255-4321).

A student may also seek advice from his or her faculty advisor or with a counselor in the Office of Student and Career Development (172 MVR).

Examinations

Both the preliminary and final examination schedules are available on the university registrar's web page at http://registrar.sas.cornell.edu.

Final Examinations

The following is quoted from the *Cornell University Faculty Handbook*, 1990, pages 66–67:

"The University Faculty long ago established, and has never reversed, the policy that each course should require a final examination or some equivalent exercise (e.g., a term paper, project report, final critique, oral presentation, or conference) to be conducted or due during the period set aside for final examinations.

"Although not specifically prohibited, it is University policy to discourage more than two examinations for a student in one 24-hour time period and especially on any one day. It is urged that members of the faculty consider student requests for a make-up examination, particularly if their course is the largest of the three involved and thus has the strongest likelihood of offering a makeup for other valid reasons, e.g., illness, death in the family, etc.

Legislation of the University Faculty governing study period and examinations is as follows:

1. No final examinations can be given at a time other than the time appearing on the official examination schedule promulgated by the Registrar's Office without prior written permission of the Dean of the Faculty.
2. No permission will be given, for any reason, to schedule final examinations during the last week of classes or the designated study period preceding final examinations.
3. Permission will be given by the Dean of the Faculty to reschedule examinations during the examination period itself if requested in writing by the faculty member, but only on condition that a comparable examination also be given for those students who wish to take it at the time that the examination was originally scheduled. The faculty member requesting such a change will be responsible for making appropriate arrangements for rooms or other facilities in which to give the examination. This should be done through the Registrar's Office.
4. No tests are allowed during the last week of scheduled classes unless such tests are part of the regular week-by-week course program and are followed by an examination (or the equivalent) in the final examination period.
5. Papers may be required of students during the study period if announced sufficiently far in advance that students do not have to spend a significant segment of the study period completing them.
6. Faculty members can require students to submit papers during the week preceding the study period.
7. Take-home examinations should be given to classes well before the end of the regular semester and should not be required to be submitted during study period but rather well into the examination period.

Students have a right to examine their corrected exams, papers, and the like, in order to be able to question their grading. They do not, however, have an absolute right to the return thereof. Exams, papers, etc., as well as grading records, should be retained for a reasonable time after the end of the semester preferably until the end of the following semester, to afford students such right of review."

Preliminary Examinations

The following is quoted from the *Cornell University Faculty Handbook* (1990), pages 65–66:

"Preliminary examinations are those given at intermediate times during a course. It is common to have three of these in a semester to encourage review and integration of major segments of the course, to provide students with feedback on how well or poorly they are progressing, and to contribute to the overall basis for a subsequent final grade.

The most convenient times and places for "prelims" are the normal class times and classrooms. But many courses, particularly large ones with multiple sections, choose to examine all the sections together at one time and to design an examination that takes more than one class period to complete. In such cases the only alternative is to hold the prelim in the evening. This practice creates conflicts with other student activities, with evening classes and laboratories, and among the various courses that might choose the same nights.

To eliminate direct conflicts, departments offering large multisection courses with evening prelims send representatives annually to meet with the dean of the University Faculty to lay out the evening prelim schedule a year in advance. Instructors of smaller courses work out their own evening prelim schedules, consulting their students to find a time when all can attend. Room assignments are obtained by the faculty member through the contact person in his or her college or the Central Reservations Coordinator.

The policy governing evening examinations is as follows:

1. Evening examinations may be scheduled only on Tuesday and Thursday evenings and only after 7:30 P.M. without prior permission from the Office of the University Faculty.

a. Such prior permission is not, however, required for examinations or makeup examinations involving small numbers of students (generally 30 or fewer) provided that the scheduled time is acceptable to the students involved and that an alternate examination time is provided for those students who have academic, athletic, or employment conflicts at the time scheduled.

2. Permission from the Office of the University Faculty to schedule on evenings other than Tuesdays and Thursdays or at a time before 7:30 P.M. will be granted only on the following conditions:

   a. Conditions such as the nature of the examination, room availability, large number of conflicts, etc., justify such scheduling.

   b. An alternate time to take the exam must be provided for those students who have academic, athletic, or employment conflicts at the time scheduled.

3. If there is a conflict between an examination listed on the schedule developed at the annual evening prelim scheduling meeting and an examination not on the schedule, the examination on the schedule shall have a priority, and the course not on the schedule must provide an alternate time to take the examination for those students faced with the conflict.

4. If there is a conflict between examinations, both of which are on the schedule developed at the annual evening prelim scheduling meeting or both of which are not on the schedule, the instructors of the courses involved must consult and agree on how to resolve the conflict. Both instructors must approach this resolution process with a willingness to provide an alternative or earlier examination.

5. Courses using evening examinations are strongly urged to indicate this in the course description listed in *Courses* and must notify students of the dates of such examinations as early as possible in the semester, preferably when the course outline is distributed."

ACADEMIC STANDING

Criteria for Good Standing

The College of Human Ecology has established a set of **minimum academic standards** that all students must meet or exceed each semester. These standards are as follows:

1. A student must maintain a semester and cumulative grade point average of 2.0 or higher.

2. A student must successfully complete at least 12 credits per semester, excluding physical education courses. Mature students must carry at least 6 credits each semester, also excluding physical education.

3. Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester such that at least 5 credits must be taken by the end of the second semester (ECON 1110 and 1120 may be used to fulfill this requirement). Transfer students must complete 12 Human Ecology credits by the end of their second semester at Cornell.

4. A student must be making "satisfactory progress" toward a Human Ecology bachelor's degree.

5. All students must complete their requirements for first-year writing seminars (FWS) during their first two semesters at Cornell. Students who do not take a required first-year writing seminar in the first semester that they matriculate at the College of Human Ecology will be placed on a warning status.

Students who have completed the second or subsequent semesters of matriculation at the college who have not taken both of the required writing seminars will be placed on a severe warning with danger of being withdrawn status. In these cases, if the student has not pre-enrolled for an FWS for the upcoming semester, a hold will be placed on the student's semester registration status until he or she is actually enrolled in an FWS. **If this requirement is not completed by the end of that semester, the student will be withdrawn from the college.**

At the end of each semester, the Committee on Academic Status (CAS) reviews each student's academic record to ensure that the **minimum academic standards** listed above are met. The committee then takes appropriate action for students whose academic achievement is considered unsatisfactory as defined by these criteria. CAS considers each case individually before deciding on a course of action. In an effort to support every student's success, the committee may take any of the following actions:

1. Place a hold on a student's university registration status or course enrollment for the current or upcoming semester.

2. Withdraw the student permanently from the college and Cornell University.

3. Require the student to take a leave of absence for one or more semesters.

4. Issue a warning to the student at one of the following levels:

   a. Severe warning with danger of being withdrawn

   b. Severe warning

   c. Warning

   These imply that if the student does not show considerable improvement during the semester, the committee may withdraw the student.

5. Add the student's name to a review list; students with this status are monitored by the committee throughout the semester.

6. Return the student to good standing.

Students placed on a required leave must appeal to CAS to return. This appeal occurs at the end of the required leave period. Students who have been withdrawn may appeal the decision before the committee during the pre-semester appeals meeting. Students who have been placed on a warning status owing to incomplete or missing grades may request that their status be reviewed for possible updating to good standing once the grade records reflect the updates or corrections. These requests should be made using the general petition process and submitted to the college registrar.

All students with an academic warning status automatically will be reviewed for specific criteria at the end of the subsequent semester. In most cases, students put on warning, severe warning, or severe warning with danger of being withdrawn status will be informed of conditions that they are expected to fulfill to return to good standing. In general, these conditions are that a student must earn a minimum semester GPA of 2.0, complete 12 credits (exclusive of physical education), and not have any incomplete, missing, F, or U grades on his or her most recent semester record.

If a student who has been previously placed on a required leave wishes to return to the college, he or she must submit a plan of study to the committee before being rejoined.

Students who have been withdrawn from the college by CAS may request that they be readmitted. Such students have three years from the date they were withdrawn to make this appeal with assistance from a counselor in the Office of Student and Career Development (172 MVR). After three years, a former student must apply for readmission through the college's Office of Admission. A student applying for readmission should discuss his or her situation with a counselor in the Office of Admission, Student, and Career Development. The student also should talk with others who may be able to help—faculty advisors, instructors, or a member of the university medical staff. Any information given to the committee is held in the strictest confidence.

Academic Integrity

Academic integrity is a critical issue for all students and professors in the academic community. The University Code of Academic Integrity states that (1) a student assumes responsibility for the content and integrity of the academic work he or she submits, such as papers, examinations, or reports, and (2) a student shall be guilty of violating the code and subject to proceedings under it if he or she:

a. Knowingly represents the work of others as his or her own.

b. Uses or obtains unauthorized assistance in any academic work.

c. Gives fraudulent assistance to another student.

d. Fabricates data in support of laboratory or field work.

e. Forges a signature to certify completion or approval of a course assignment.

f. Uses an assignment for more than one course without the permission of the instructor involved.

g. Uses computer hardware and/or software to abuse privacy, ownership, or user rights of others.

h. In any manner violates the principle of absolute integrity.

The college's Academic Integrity Hearing Board, which consists of a chairperson, three

faculty members, and three students, hears appeals from students who have breached the code. It also deals with cases brought directly to it by members of the faculty.

Academic Records

Students may obtain their Cornell academic record in several ways. The **Cornell transcript**, which is the official record of the courses, credits, and grades that a student has earned can be ordered with no charge at the Office of the University Registrar (B7 Day Hall) or online at http://transcript.cornell.edu. For more information, call 255-4232. Students may also access their grades and course schedules electronically using *Student Center*. **Students should be in the habit of checking *Student Center* by the second week of every semester to confirm that their schedule and grade options are correct**. Adjustments must be made before published enrollment deadlines.

The college also maintains a **graduation progress worksheet** for each student showing progress toward the degree. At the beginning of fall semester continuing students should check their updated worksheet on the registrar tab at www.human.cornell.edu. It is important to check this document and bring any errors to the attention of the staff in the college registrar's office (146 MVR).
Disclaimer: These worksheets are unofficial tally tools used by the college registrar and in no way substitute for a student's responsibility for tracking the progress toward completing degree requirements as outlined in the curriculum sheet for each major.

Access to Records

The Family Educational Rights and Privacy Act of 1974 assures students of privacy of their records. The law also assures students' access to their records. Information concerning a student's relationship with the university is considered restricted and may be released only at the student's specific written request. Restricted information includes the courses elected; grades earned; class rank; academic and disciplinary actions by appropriate faculty, student, or administrative committees; and financial arrangements between the student and the university. Letters of recommendation are restricted information unless the student has specifically waived right of access.

Students who want additional information on access to their records may contact the Office of the College Registrar (146 MVR) or the Office of the University Registrar (B7 Day Hall). An inventory of those student records maintained by Cornell University offices in Ithaca, their location, and cognizant officers are available in the Office of the Dean of Students (401 Willard Straight Hall).

For specific information, refer to the university's policy "Access to Student Information" at www.univco.cornell.edu/policy/ASI.html, or talk with the college registrar.

ACADEMIC HONORS AND AWARDS

The college encourages high academic achievement and recognizes outstanding students in several ways.

Honors

Dean's List. Excellence in academic achievement is recognized each semester by placing on the Dean's List the names of students who have completed satisfactorily at least 12 credits of letter grades and who have a semester GPA of 3.7 or above. No student who has received an F or U in an academic course will be eligible.

Kappa Omicron Nu seeks to promote graduate study and research and to stimulate scholarship and leadership toward the well-being of individuals and families. As a chapter of a national honor society in the New York State College of Human Ecology, it stimulates and encourages scholarly inquiry and action on significant problems of living—at home, in the community, and throughout the world.

Students are eligible for membership if they have attained junior status and have a cumulative average of B or higher. Transfer students are eligible after completing one year in this institution with a B average.

Current members of Kappa Omicron Nu elect new members. No more than 10 percent of the junior class may be elected to membership and no more than 20 percent of the senior class may be elected. Graduate students nominated by faculty members may be elected. The president of Kappa Omicron Nu has the honor of serving as First Degree Marshall for the college during May commencement.

Bachelor of science with honors recognizes outstanding scholastic achievement in an academic field. Programs leading to a degree with honors are offered to selected students. Information about admission to the programs and their requirements may be obtained from the appropriate department or division. To graduate with honors a student must take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and successfully defend it in front of a committee.

Bachelor of science with distinction recognizes outstanding scholastic achievement. Distinction is awarded to students in the top 10 percent of the graduating class based on the last 60 credits earned at Cornell. The graduating class includes students who will complete requirements for bachelor of science degrees in January or May of the same academic year or the prior August. Names of seniors who meet these requirements are presented to the faculty of the college for approval.

The primary objectives of the honor society, **Phi Kappa Phi**, are to promote the pursuit of excellence in higher education and to recognize outstanding achievement by students, faculty, and others through election to membership. Phi Kappa Phi is unique in that it recognizes scholarship in all academic disciplines. To be eligible for membership students must rank in the top 10 percent of the senior class, or in the top 5 percent of the junior class. Provisions also exist for the election of faculty members and graduate students whose work merits recognition.

Awards

The Elsie Van Buren Rice Public Speaking Contest awards prizes totaling $2,500 for speeches related to published research by Human Ecology faculty members. The contest is held each year in March.

The Flora Rose Prize is given to a Cornell Human Ecology junior or senior whom, in the words of the donor, "shall demonstrate the greatest promise for contributing to the growth and self-fulfillment of future generations." Students apply in the spring semester. The recipient receives a cash prize of $750.

The Florence Halpern Award is named for the noted psychologist, Dr. Florence Halpern, in recognition of her lifelong interest in "innovative human service, which betters the quality of life." In that spirit the award is presented to an undergraduate in the College of Human Ecology who has demonstrated, through supervised fieldwork or community service, creativity in the search for solutions to human problems. Students apply in the spring semester. The award carries a $750 cash prize.

COLLEGE COMMITTEES AND ORGANIZATIONS

Student Groups and Organizations

Following are brief descriptions of some of the organizations that offer valuable experiences to human ecology students. Information about many other student activities on campus may be obtained from the Office of the Dean of Students (401 Willard Straight Hall).

The **Cornell Design League** was formed to give students interested in apparel a chance to express their creativity outside of the classroom by producing a fashion show every spring. It has become concerned with all aspects of a professional presentation. Consequently, it also provides a creative outlet for those interested in graphics, photography, illustration, or theater production. Although many of its designers are part of the Department of Fiber Science & Apparel Design, the Design League welcomes people of all majors and schools.

Students have opportunities to work throughout the community in a variety of service capacities. They volunteer in day care centers, youth programs, health-related agencies, services for elderly people and people with disabilities, as well as nutrition programs, arts organizations, and Ithaca schools. For further information, contact the **Public Service Center** (200 Barnes Hall). Call 255-1148 for information about volunteer work or 255-1107 for information about work-study arrangements.

The **Human Ecology Ambassadors** is a group of Human Ecology undergraduates who assist the Office of Admission in the area of new student recruitment and yield. Ambassadors participate in group conferences with prospective students to provide information from a student's perspective, assist with on-campus programs for high school students and potential transfer students, and help with prospective student phonathons and letter writing. In addition, ambassadors attend regular meetings and serve as coordinators for activities in the Office of Admission.

For information, contact the Office of Student and Career Development (172 MVR, 255-5471).

The **Human Ecology Mature Students Association** is an organization of students who are 24 years of age or older at the time of matriculation. Many mature students need to balance family, work, and other concerns with their academic efforts. The Mature Students Association strives to help by providing a forum for resource exchange and referral, support, socializing, and special projects depending upon expressed interest. These goals are pursued through seminars and informational meetings, the mature students listserv, supplementary orientation activities, liaison with other university offices, and the encouragement of informal networking. For more information, contact Patti Papapietro in the Office of Admission, Student, and Career Development (172 MVR).

Students interested in the relationship between the physical environment and human behavior may join the **Human-Environment Relations Students Association**. For more information, contact the Department of Design and Environmental Analysis.

The **International Facility Managers Association (IFMA)** also has a student chapter. Membership information is available from the Department of Design and Environmental Analysis.

The **Association for Students of Color (ASC)** unites Human Ecology students of color to provide a supportive foundation for their enrollment, retention, graduation, and career placement. ASC members work toward these goals in the following ways:

1. participating in admissions hosting programs and conducting high school visitations
2. sponsoring presentations on career and graduate school outcomes of a Human Ecology education
3. providing volunteer services to the Cornell and Ithaca communities
4. attending regular meetings and hosting annual fall and spring forums

For more information, contact Verdene Lee in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **PreLaw Undergraduate Society (PLUS)** is sponsored by Human Ecology and welcomes members from the Cornell community. Meetings provide information and support for students considering careers in law. Programs include information on the law school admission process, law school applications, and LSAT preparations. Additionally, PLUS offers tours of the Cornell Law School and information panels with current law students. Guest speakers include practicing attorneys, law faculty, and current law school students. For more information, contact Deanne Maxwell in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **Preprofessional Association Toward Careers in Health (PATCH)** provides support, advising, and up-to-date information to students pursuing careers in health care. Programs include academic advising, guest speakers from allopathic and alternative medicine, information on medical school admissions, exposure to complementary health-care career options, MCAT preparation tips, information on research and internship opportunities, and a visit to a local medical school. This student-run organization is sponsored by Human Ecology and is open to the Cornell community. For more information, contact Paula Jacobs in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **Orientation Committee** consists of students and advisors interested in planning and implementing programs to acquaint new students with the College of Human Ecology. The committee is particularly active at the beginning of each semester and is always eager for new members. For more information, contact Patti Papapietro in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

Membership in the **Sloan Student Association** is open to students interested in health care and related fields. For more information, contact the president of the association (122 MVR, 255-7772).

The **Students for Gerontology (SFG)** is composed of students from a wide variety of majors who are interested in career and internship opportunities that contribute to the well-being of our aging population. Programs sponsored by this organization focus on developing linkages with community organizations and other student gerontology groups. SFG meets monthly. For more information, contact Nancy Wells, faculty advisor, Bronfenbrenner Life Course Center (E220 MVR, 254-6330).

The **Health and Nutritional Undergraduate Society (Health NUTS)** promotes nutritional well-being through education, communication, and research. Members of the student chapter organize programs such as Food and Nutrition Day in March, and host on-campus speakers in nutrition and health-related fields. The student chapter is open to all students interested in nutrition education. For more information, contact Cha-Sook You (B21 Savage Hall).

Committees and Councils

Several official organizations exist within the college to deal with matters of policy and to provide leadership in college planning. Most include elected student and faculty representatives; the actions of these various groups affect all students directly or indirectly.

The Educational Policies Committee (EPC) has two student members, one graduate and one undergraduate, who vote along with the faculty members on all matters relating to college academic policy. Recommendations are submitted to this committee regarding revisions in degree requirements, new curriculum changes, and new course approval.

Students also have the opportunity to serve on the **Admissions Policy Subcommittee** and the **Academic Integrity Hearing Board**.

The Selection Committee for the Chancellor's Award for Excellence in Teaching or Professional Service handles the nomination and selection process for this prestigious yearly award. The committee consists of three teaching faculty members, one professional staff member, and three undergraduate members.

The **Human Ecology Alumni Association Board of Directors** includes two student board members—one junior and one senior. One student is selected each spring to begin a two-year term as student representative. The two students co-chair the board's Student Activities Committee, which works to increase the visibility of the Alumni Association among the student body by funding a variety of activities. The student members also bring an important perspective to board deliberations about programming and annual goals.

The **Dean's Undergraduate Advisory Council** is a student group whose members promote communication between undergraduates and the Human Ecology administration. Interested students apply each spring to join the council for the following academic year.

INTERDEPARTMENTAL COURSES

HE 1100 Critical Reading and Thinking
Fall, spring, or summer. 2 credits (credit toward graduation depends on individual college). Limited enrollment. Prerequisite: freshman or sophomore standing; juniors and seniors by permission of instructor. S–U or letter grades. Staff.
Enables students to increase critical reading and thinking abilities. Examines theory and research associated with a wide range of reading, thinking, and learning skills. Emphasis is placed on developing and applying analytical and evaluative skills.

HE 1110 College Achievement Seminar
Summer, six-week session. 2 credits (credit toward graduation depends on individual college). Prerequisite: Pre-freshman Summer Program students. S–U or letter grades. Staff.
Improves the study and learning skills of incoming freshmen. Emphasis is placed on acquisition of skills necessary to achieve academic success. Topics include time management, note taking, mapping, textbook comprehension, exam preparation, and exam strategies. The application of theory to the demands of Cornell course work is stressed. In addition, students are introduced to library and computing resources through hands-on learning.

HE 4070 Leadership in the Nonprofit Environment
Fall. 3 credits. Limited to 30 students. Letter grades only. B. Bricker.
The nonprofit sector contributes nearly 10 percent of U.S. GNP and employs 11 to 12 percent of citizens. This economic sector touches all our lives—as volunteers, donors, receivers of service, employees, or board members. This course provides an opportunity to explore the challenges and opportunities of the nonprofit sector. After becoming familiar with the issues and complications of strategic charitable giving, students consider actual grant applications from community organizations and make decisions to award $10,000 in grant aid. HE 4070 is made possible by a generous gift of $10,000 from the Sunshine Lady Foundation. Students learn to read, evaluate, and write effective grant proposals. They create a Request for Proposal (RFP) to invite community nonprofits to apply for funding. They study organizational missions, the strengths and challenges of private not-for-profit organizations, the motivation for giving time and money, and many related themes.

HE 4991/4992 Biology & Society Honors Project I and II

Fall and spring (yearlong). Credit TBA. Students who are admitted to the honors program are required to complete two semesters of honors project research and to write an honors thesis. The project must include substantial research, and the completed work should be of wider scope and greater originality than is normal for an upper-level course. The student must find a project supervisor and a second faculty member willing to serve as faculty reader; at least one of these must be a member of the Biology and Society faculty. Minimally, an honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements.

THE URBAN SEMESTER PROGRAM IN MULTICULTURAL DYNAMICS IN URBAN AFFAIRS

Cornell in New York City provides students with many study options that focus on multicultural dynamics in urban affairs. The options available include internships, individual and group community service projects, research, independent study, collaborative learning, and mentorships. Student must enroll concurrently in the three courses HE 4800, 4900, and 4950. Students learn through reflection and action/ Program options are possible throughout the academic year, and summer.

Courses of study enable students to seek out the relationship between theory and practice, apply theory to practice, identify and acquire professional practice skills, and learn about the impact of diversity on New York City. By applying ethnographic research techniques and methods, students learn to think conceptually, reflect on their actions, practice leadership, and be agents of change.

HE 4060 Fieldwork in Diversity and Professional Practice: The Culture of Medicine and Public Health

Summer, eight-week session. 3 credits. S. Beck.

This course is part of the Urban Semester Program in New York City. Students learn through a cycle of experience and reflection. Over the course of eight weeks, students learn how to implement experience-based learning techniques and perspectives to enhance their competencies as initiates of professional practice. Students spend four days each week in an internship of their own choosing. One day each week, students have discussions with professionals who represent different aspects of the New York City economy. This exposure enables students to explore a variety of professional perspectives and practices. Students participate in reflections seminars with the director of the program to explore student internship experiences and learning.

HE 4080 Fieldwork in Diversity and Professional Practice: Community and Public Service

Summer, eight-week session. 3 credits. M. A. Cocchini.

This course is part of the Urban Semester Program in New York City. Students learn through a cycle of experience and reflection. Over the course of eight weeks, students learn how to implement experience-based learning techniques and perspectives to enhance their competencies as initiates of professional practice. Students spend four days each week in an internship of their own choosing. One day each week, students have discussions with professionals who represent different aspects of the New York City economy. This exposure enables students to explore a variety of professional perspectives and practices. Students participate in reflections seminars with the director of the program to explore student internship experiences and learning.

HE 4090 Fieldwork in Diversity and Professional Practice: Finance, Business, and Other Settings

Summer, eight-week session. Variable credit. M. Cocchini.

This course is part of the Urban Semester Program in New York City. Students learn through a cycle of experience and reflection. Over the course of eight weeks, students learn how to implement experience-based learning techniques and perspectives to enhance their competencies as initiates of professional practice. Students spend four days each week in an internship of their own choosing. One day each week, students have discussions with professionals who represent different aspects of the New York City economy. This exposure enables students to explore a variety of professional perspectives and practices. Students participate in reflections seminars with the director of the program to explore student internship experiences and learning.

HE 4800 Participatory Action Research

Fall and spring. 5 credits. Students must take course during semester they participate in Urban Semester Program. S. Beck.

Community service-learning curriculum that introduces the history and development of North Brooklyn, community organizing, and the nature of service in contradistinction to charity and citizenship development. Students are actively engaged in two different projects with two different community-based partners. Students are expected to put into practice the service theory they learn from our partners that emphasizes their role as members of the communities in which they participate.

HE 4900 Reflexivity and Reflective Practice in Ethnography

Fall and spring. 5 credits. Students must take course during semester they participate in Urban Semester Program. S. Beck.

Students use ethnographic methods to write their own ethnographies based on their experiences in their internships.

HE 4950 Ethnographic Methods and Research

Fall and spring. 5 credits. Students must take course during semester they participate in Urban Semester Program. S Beck.

Provides students with the fundamentals of ethnographic methods, including historical and philosophical developments, and the advantages of using ethnography in qualitative research.

DESIGN AND ENVIRONMENTAL ANALYSIS

S. Danko, chair (MVR, 255-3165); K. Gibson, director of undergraduate studies; N. Wells, director of graduate studies; F. Becker, S. Curtis, J. Elliott, P. Eshelman, G. Evans, D. Feathers, R. Gilmore, A. Hedge, Y. Hua, J. Jennings, J. Laquatra, L. Maxwell, L. Scolere

Note: A minimal charge for photocopied course handouts may be required.

DEA 4+1 Master's Degree Program

Outstanding students who complete their four-year undergraduate degree in DEA may apply for a master of arts/M.A. (interior design) or a master of science/M.S. (human environment relations) degree that typically requires one additional year of graduate study.

Through careful planning by the beginning of their junior year, many of the courses required in the M.A. or M.S. programs can be taken during the undergraduate years, creating an opportunity to focus the fifth year of study on completing graduate courses and thesis requirements. Typically, students will take four to five courses in their fall semester as a graduate student, and two to three courses plus their thesis research in the spring semester. Students should expect to complete their thesis by the end of the summer term of their fifth year.

Admission to the 4+1 Master's program is not automatic. Students must meet with their advisors early in their undergraduate programs to plan carefully for this possibility. In the fall of the senior year, interested students must submit an online application to the Graduate School. The GRE exam and a portfolio are not required for 4+1 applicants. In addition to the online application, 4+1 applicants must submit a 4+1 study proposal to the department. Students who have compiled a strong undergraduate record in the department are usually good candidates for admission into the graduate program in Design and Environmental Analysis.

DEA 1101 Interior Design Studio I (also VISST 1101)

Fall. 3 credits. Limited to 20 students per sec. Prerequisite: DEA majors; permission of instructor for nonmajors. Option I majors must take DEA 1101 in fall of first year. B– or higher in DEA 1101 required to take DEA 1102 and 1150. Must complete incomplete grade in DEA 1101 before taking 1102 and 1150. Cost of materials: approx. $200. J. Elliott.

Introduces the fundamental vocabulary and principles of two- and three-dimensional design. Students experiment with the development of image and form through problem-solving activities. Visit http://courses.cit.cornell.edu/dea1101.

DEA 1102 Interior Design Studio II
Spring. 3 credits. Option I DEA majors only. Prerequisite: DEA 1101. Option I majors must take DEA 1102 and 1150 concurrently. B– or higher in DEA 1102 required to take DEA 2201. Must complete incomplete grade in this course before taking DEA 2201. Cost of materials: approx. $200; shop fee: $10. P. Eshelman.
Studio course in three-dimensional design with an interior design emphasis. Explores problems in spatial organization through drawings and models.

DEA 1110 Making a Difference by Design
Fall. 3 credits. Limited to 130 students. Lab fee: $15 (charged to bursar bill). S. Danko.
Focuses on issues of leadership, creative problem-solving, and risk-taking through case-study examination of leaders in business, education, medicine, human development, science, and other areas who have made a difference using design as a tool for positive social change. Using a micro to macro framework, students examine how design affects their daily lives and future professions from the person to the planet. Additional topics include nurturing creativity, visual communications, socially responsible design and business, culture, and ecological issues.

DEA 1150 Design Graphics and Visualization
Spring. 3 credits. Limited to 18 students. Prerequisite: Option I DEA majors only; DEA 1101 with grade of B– or higher. Corequisite: DEA 1102. B– or higher in DEA 1150 required to take DEA 2201. Must complete incomplete grade in this course before taking DEA 2201. Minimum cost of materials: $200; technology fee: $10. K. Gibson.
Introductory graphics course for interior designers. Emphasizes orthographic and perspective drawing, formal and conceptual presentation methods. Reinforces concepts through projects, readings, and field trips.

DEA 1500 Introduction to Human-Environment Relations (also COGST 1500)
Spring. 3 credits. Limited to 15 students per sec (20 sec). Lec, disc. G. Evans.
Human-Environment Relations is an interdisciplinary field concerned with how the physical environment and human behavior interrelate. Most of the course focuses on how residential environments and urban and natural settings affect human health and well-being. Students also examine how human attitudes and behaviors affect environmental quality. Issues of environmental justice and culture are included throughout. Hands-on projects plus exams. Lecture and discussion sections Writing in major (DEA 1501) option also is available.

DEA 2030 Digital Communications
Spring. 2 credits. Limited to 25 students. Priority given to DEA majors. Lab fee: $10. DEA faculty.
Digital information technologies for designers of the built environment. Students explore issues in relation to text and image through analysis and composition of form and content. Through a series of projects the students work toward the development of a professional web-based portfolio of self-promotional materials. The primary objective is to reinforce principles of visual communications while learning the rudiments of vector, raster, and html graphic software.

DEA 2040 Introduction to Building Technology
Spring. 2 credits. Y. Hua.
Introduction to a wide range of building technology. The goal is to develop basic understanding of building systems and components, their performance criteria, and the implications of different technology for building occupants, building energy consumption, and other environmental impacts. Topics include site and climate, structural systems, building envelope, passive strategies for building conditioning, HVAC systems, interior systems, lighting systems, acoustics, electrical systems, building control, construction process and building maintenance, and principles of building systems integration for occupant health, comfort, emissions reduction, and environmental sustainability.

DEA 2150 Digital Graphics
Fall, first seven weeks of semester. 1 credit. Prerequisites: DEA majors or permission of instructor, DEA 1101. Letter grades only. S. Curtis.
Investigates the use of computer-graphic software programs for the purpose of design, visualization, and presentation. The course investigates the inherent differences between raster and vector graphics and how to use a variety of computer graphics programs such as Adobe Photoshop, Illustrator, Sketch Up, and Acrobat to achieve a desired end result. Lab-based course providing technical illustration in Adobe Illustrator, Photoshop, and Sketch Up. Students may be interested in DEA 4540 (Computer-Aided Facilities Management) as well.

DEA 2201 Interior Design Studio III
Fall. 4 credits. Limited to 18 students. Prerequisites: Option I DEA students; DEA 1101, 1102, 1110, 1150, and 1500 (minimum grades of B–); B– or higher required to take DEA 2202. Must complete incomplete in 2201 before taking 2202. Corequisites: DEA 2510, DEA 2150, DEA 4600. Minimum cost of materials: $150; lab fee: $40; required field trip: approx. $130. J. Jennings.
Third semester in the studio sequence of eight semesters. The theme and objectives focus on design as critical thinking, introducing means by which students can think, draw, write, and build their way critically through design. Taken concurrently with DEA 2510, the course applies historical theory to contemporary design projects. Also includes a collaborative project with a professor and students from another design discipline.

DEA 2202 Interior Design Studio IV
Spring. 4 credits. Prerequisites: Option I DEA students; DEA 2201 and 2030. Pre- or corequisite: DEA 2040. Must complete incomplete grade in this course before registering for DEA 3301. Minimum cost of materials: $120; field trip fee. R. Gilmore.
Based on programmatic criteria from real clients, students learn how to design several types of interior environments, from health care facilities to local nonprofit agencies. Emphasis is on space planning, lighting design, construction of custom light fixtures, and service learning, where students use design to transform the facilities of social service agencies in the community.

DEA 2410 Introduction to Computer-Aided Design (CAD)
Spring, first seven weeks of semester. 1 credit. Prerequisites: DEA majors or permission of instructor; DEA 1101. Letter grades only. Minimum cost of materials: $50. S. Curtis.
Provides an understanding of, and experience with, electronic drafting on the microcomputer. The course includes a basic understanding of the features, limitations, and considerations associated with the operation of the latest release of AutoCAD. By the end of the course, the student will be proficient enough with the AutoCAD software to draw and plot most projects required by their course of study as they relate to architecture and interior design. Students may be interested in DEA 2420 (Advanced Computer-Aided Design) as well.

DEA 2420 Advanced Computer-Aided Design (CAD)
Spring, second seven weeks of semester. 1 credit. Prerequisites: DEA majors or permission of instructor; DEA 1101. Letter grades only. Minimum cost of materials $50. S. Curtis.
Provides a thorough understanding of the 2-D features, limitations, and considerations associated with the operation of the latest release of AutoCAD. This course builds on knowledge gained in DEA 2410 and requires DEA 2410 as a prerequisite. Commands and concepts such as multi-sheet plotting, xreference drawings, blocks and attributes, raster images, user coordinate systems, and customization of AutoCAD are covered. This course will give the student a high level of proficiency with AutoCAD software as it relates to architecture and interior design.

DEA 2500 The Environment and Social Behavior
Fall. 3 credits. Limited to 16 students. Priority order: DEA seniors, juniors, sophomores, freshmen. Prerequisites: DEA 1500 and written permission of instructor. G. Evans.
This course is about architecture and human behavior and it centers on two key principles: (1) the complex interplay of social and personal factors with the physical environment largely determines how the built environment influences human well-being; (2) aesthetics is not sufficient in judging design—we must also consider how the built environment affects health, interpersonal relationships, and performance along with preference. Involves two major projects: one in collaboration with a design studio and the other with a real community client.

DEA 2510 History and Theory of the Interior
Fall. 3 credits. Limited to 35 students. Priority given to DEA majors. J. Jennings.
A historic study of interior architecture and design with an emphasis on the concepts of design theory. Overarching themes encompass several time periods from the classical to the 20th century and isolate cultural patterns, spatial ideas, dialectics, design elements, and theorists. Reading, discussion, analytical exercises, essays, and a field trip are included. Visit http://courses.cit.cornell.edu/dea2510.

DEA 2550 Introduction to Facility Planning and Management
Fall. 2 credits. Letter grades only. F. Becker.
Introduction to the field of facility planning and management. Course examines how the planning, design, and management of an

organization's physical facilities can help it meet its business objectives. Through readings, lectures, and discussions, students become familiar with basic characteristics and issues of strategic planning, space planning and design, project management, building operations, workplace change management, real estate, and computer-aided facility management systems. Different approaches to sustainable facility design and issues in effectively managing and operating green facilities are explored in a term project working with organizations that have implemented sustainable designs, policies, and practices.

DEA 3000 Special Studies for Undergraduates

Fall or spring. Credit TBA. DEA faculty.
Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the college registrar's office. The form, signed by both the instructor directing the study and the head of the department, is filed at course registration or during the change-of-registration period.

DEA 3030 Interior Materials and Sustainable Elements

Fall. 3 credits. Limited to 45 students. Prerequisite: interior design, hospitality, or architectural studio or permission of instructor. Approx. cost of materials: $10. R. Gilmore.
A sustainable approach to the evaluation and selection of materials, finishes, and furnishings for the built environment has the potential to protect our planet. This course provides an introduction to sustainable sources and asks students to manipulate materials, understand performance testing, use building codes, create a life-cycle cost analysis, and complete interior specifications. Field trips provide an overview of the manufacturing process, and group projects culminate in the presentation of research on current "green" products and resources.

DEA 3040 Introduction to Professional Practice of Interior Design

Spring. 1 credit. Limited to 15 students. Prerequisite: Option I DEA students. DEA faculty.
Introduction to organizational and management principles for delivery of interior design and facility management services. Covers basic organizational structures and basic management functions within interior design and facility management organizations, work flow and scheduling, business practices, legal and ethical responsibilities and concerns, contracts, basic contract documents such as working drawings and specifications, supervision of construction and installation, and cost estimation.

DEA 3050 Construction Documents and Detailing

Spring. 2 credits. Prerequisites: DEA 3301 and 3030 or permission of instructor. Corequisite: DEA 3302. Minimum cost of materials: $50; required field trips: $10. R. Gilmore.
A continuous dialogue between the idea for an interior space and the reality of its final built form is contained within construction documents, also known as working drawings and specifications. Students study the history of architectural documentation, the organization of construction drawings, schedules, and specifications, and the detailing of interior elements and construction methods by touring a local millwork shop. Each student completes a comprehensive set of construction documents.

DEA 3250 Human Factors: Ergonomics–Anthropometrics

Fall. 3 credits. Recommended: DEA 1500. Undergraduate sec of DEA 6510; shares lec but meets for an additional hour. DEA 6510 has additional readings and projects. A. Hedge.
Implications of human physical and physiological characteristics and limitations on the design of settings, products, and tasks. An introduction to engineering anthropometry, biomechanics, control/display design, work physiology, and motor performance. Includes practical exercises and field project work. Visit http://ergo.human.cornell.edu.

DEA 3301 Interior Design Studio V

Fall. 5 credits. Prerequisites: DEA 1110, 1500, 2201, 2202, 2030, and 2040. Corequisites: DEA 3030 and 4590. Must complete incomplete grade in this course before registering for DEA 3302. Minimum cost of materials: $150; shop fee: $10; optional field trip: approx. $10. P. Eshelman.
This intermediate-level interior design studio focuses on design for a special population inclusive of young children, older adults, and people of any age living with a congenital or hereditary condition, injury, or disease. The course is organized around a semester-long project broken into four phases: pre-design, design, full-scale model construction, and design documentation and presentation. Collaboration with students in DEA 2500/6600 provides experience in the application of evidence-based information in the design process.

DEA 3302 Interior Design Studio VI

Spring. 5 credits. Limited to 18 students. Prerequisites: DEA 3301 and 3030 or permission of instructor. Corequisite: DEA 3050. Must complete incomplete grade in this course before registering for DEA 4401. Minimum cost of materials: $200; shop fee: $10; field trip fee: $20. K. Gibson.
Sixth semester in the studio sequence of eight semesters. Emphasizes use of the microcomputer as a creative tool in the design process. Explores social, cultural, and physical factors related to the interior environment through assignments, readings, and a field trip. Design and problem-solving skills are reinforced according to project type.

DEA 3500 Human Factors: The Ambient Environment

Spring. 3 credits. Recommended: DEA 1500. Undergraduate sec of DEA 6520; shares lec but meets for an additional hour. DEA 6520 has additional readings and projects. A. Hedge.
Introduces human-factor considerations in lighting, acoustics, noise control, indoor air quality and ventilation, and the thermal environment. Views the ambient environment as a support system that should promote human efficiency, productivity, health, and safety. Emphasizes the implications for planning, design, and management of settings and facilities. Visit http://ergo.human.cornell.edu.

DEA 3520 Inside-Out Ergonomics I: Anatomy for Design

Spring. 3 credits. Prerequisite: DEA 1500, 3250, or 6510, or permission of instructor. S-U or letter grades. D. Feathers.
This course serves as an introduction to human anatomy as it relates to design. Students learn musculoskeletal anatomy and human body measurement for ergonomic design. Musculoskeletal function is related to human performance in support of creative design decisions.

DEA 3540 Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: DEA 4590 or permission of instructor. Letter grades only. Minimum cost of materials: $200. Y. Hua.
For advanced undergraduates interested in facility planning and management. Purpose is to provide basic tools, techniques, and concepts useful in planning, designing, and managing facilities for large, complex organizations. Covers strategic and tactical planning for facilities, organizing to deliver facility management services, project management, space forecasting, space allocation policies, programming, relocation analysis, site selection, building assessment, space planning and design, furniture specifications, and moves. Considers sociopsychological, organizational, financial, architectural, and legal factors.

DEA 4000–4010–4020–4030 Special Studies for Undergraduates

Fall or spring. Credit TBA. S–U or letter grades. DEA faculty.
For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of DEA not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department office. This form must be signed by the instructor directing the study and the director of undergraduate studies and filed at course registration or within the change-of-registration period in the college registrar's office, 146 MVR, along with an add/drop slip. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department head is necessary. Students, in consultation with their advisors and the instructor, should register for one of the following subdivisions of independent study.

DEA 4000 Directed Readings
For study that predominantly involves library research and independent reading.

DEA 4010 Empirical Research
For study that predominantly involves data collection and analysis or laboratory or studio projects.

DEA 4020 Supervised Fieldwork
For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

DEA 4030 Teaching Apprenticeship
For study that includes teaching methods in the field and assisting faculty with instruction. Students must have demonstrated a high level of performance in the subject to be taught and in the overall academic program.

DEA 4100 Facility Planning and Design in a Diverse Society

Spring. 3 credits. Prerequisites: DEA 1500, 1110, 2500, 6530, or permission of instructor. Letter grades only. L. Maxwell.
Upper-level undergraduate course appropriate for undergraduate and graduate students in facility planning and management, human-

environment relations, and interior design, as well as students outside of DEA who are interested in how the built environment should respond to a diverse society. The course examines facility planning and design issues in a diverse society. Specifically, the role of culture, gender, stage in the life cycle, and disability in planning facilities of various types is studied. This course examines the issues of diversity from two perspectives: (1) how are the implicit and explicit assumptions about the user expressed in various aspects of the built environment in our society; and (2) how do we purposely plan facilities in a diverse society.

DEA 4150 Strategic Facility Planning for Social Institutions

Spring. 3 credits. Prerequisites: DEA 1500, 2500, 4590, or permission of instructor. Letter grades only. L. Maxwell.

Upper-level undergraduate course appropriate for undergraduate and graduate students in facility planning and management, the Biology and Society program, the Sloan program, and design students interested in facility planning and design issues for health care and educational institutions. The course examines the facility planning and management issues that affect (1) the long-term care industry, including assisted living, continuous care, and skilled nursing facilities; and (2) the K–12 educational industry. The course examines how facilities respond to changes in (1) the needs of their target population, (2) technology and communications, (3) sustainability, (4) health care delivery practices, (5) changes in educational policy and practice, (6) regulatory and policy issues related to the health care and educational industries, and (7) daily operational and maintenance issues. Health care and educational facilities must be flexible in responding to the changing marketplace. The goal of the course is to give students the skills and tools necessary to handle the facility planning and management issues of complex social institutions. The emphasis in the course is on long- and short-range planning issues and how facility issues intersect with management issues.

DEA 4220 Ecological Literacy and Design (also ARCH 4601)

Spring. 3 credits. Prerequisite: junior or senior standing. Letter grades only. Cost of field trips: approx. $25. J. Elliott.

Lecture/seminar course for advanced undergraduates interested in learning about the effects of designing the built environment on the biophysical world. Course objectives are to develop sensitivities to environmental issues, construct conceptual frameworks for analysis, and demonstrate how ecological knowledge can be applied to the practice of design through researching the use of the LEED building certification process for real-world clients and stakeholders. Visit http://courses.cit.cornell.edu/dea4220.

[DEA 4230 Restaurant Design Charrette

Spring. 1 credit. Limited to 18 students. Prerequisite: permission of instructor. Letter grades only. Minimum cost of materials: $50. Next offered 2011–2012. R. Gilmore and S. Robson.

This intensive weekend-long course pushes the boundaries of current restaurant design by developing a concept plan for an innovative restaurant in a nontraditional setting. Students work in teams to develop design solutions and prepare design presentations for review by course instructors and visiting design professionals.]

DEA 4300 Furniture as a Social Art

Spring. 3 credits. Limited to 15 students. Prerequisite: permission of instructor. Cost of building materials: $150. (Additional shop hours are made available.) P. Eshelman.

Focuses on how innovation in furniture design is inspired. The four sources of inspiration explored are user needs, aesthetic interpretation, material and manufacturing technologies, and environmental impact. The interplay among these four sources of inspiration is examined with emphasis on the first, user needs. Assignments involve both analyzing furniture products currently on the market and designing and constructing a furniture piece for a special population inclusive of young children, older adults, and people of any age living with a congenital or hereditary condition, injury, or disease.

DEA 4401 Interior Design Studio VII

Fall. 5 credits. Prerequisites: DEA 3302, 3030, 3040, and 3050. Must complete incomplete grade in this course before registering for DEA 4402. Minimum cost of materials: $150; field trip: $50. R. Gilmore.

Comprehensive historic preservation design studio in which students complete each phase of the adaptive reuse of a historic structure. After site visit and historic survey work, students conduct demographic research, complete a building assessment, and design a new use for a viable, yet older structure. Lecture topics range from professional practice strategies, to the history of preservation, to the Secretary of the Interior's Standards for Rehabilitation. Components of the work include program documents, code compliance, concept development, schematic and design development presentations, and construction documents.

DEA 4402 Interior Design Studio VIII

Spring. 5 credits. Prerequisites: DEA 3301, 3302, 3030, and 3040. Minimum cost of materials: $150. L. Scolere and J. Elliott.

Completion of advanced interior design problems broken into five phases: programming; schematic design and evaluation; design development, including material and finish selection; design detailing; and in-process documentation and the preparation of a professional-quality design presentation.

DEA 4520 Inside-Out Ergonomics II: Biomechanics and the Built Environment (also BME 4520)

Fall. 3 credits. Prerequisite: DEA 3520 or permission of instructor. S–U or letter grades. D. Feathers.

The built environment places physical demands on the human body. Students learn what forces are being placed on the body and how to create biomechanical models of these physical demands. The class then assembles these skills to support design opportunities for healthy, productive occupational environments. This course is appropriate for advanced undergraduate students interested in the concepts of biomechanics in ergonomics.

DEA 4530 Planning and Managing the Workplace

Fall. 3 credits. Prerequisite: junior or senior standing. F. Becker.

Through lectures, readings, and projects, this course explores how the planning, design, and management of health care facilities affects patients, care providers, and health care quality. Course emphasizes the role of evidence-based design and examines issues and challenges in generating, interpreting, and applying different forms of evidence to improve health care quality and patient and staff experience. The final project involves students using different forms of evidence to develop their own innovative solutions to design dilemmas typically faced in planning and designing a hospital.

DEA 4540 Computer-Aided Facilities Management

Fall, second seven weeks of semester. 1 credit. Prerequisites: none. Letter grades only. S. Curtis.

Investigates the use of computer-aided facilities management software in facilities management. Emphasis is placed initially on understanding how FM CAD systems work. Topics such as Building a Space Inventory Database, Adding Occupancy Data, AutoCAD commands, Reports, Asset Management, and Strategic Planning and Stacking are learned and discussed.

DEA 4550 Research Methods in Human-Environment Relations

Fall. 3 credits. N. Wells.

Develops students' understanding and competence in the use of research and analytical tools to study the relationship between the physical environment and human behavior. Emphasizes evaluation of internal and external validity as well as measurement reliability and validity. Topics include research design, unobtrusive and obtrusive data-collecting tools, the processing of data, and effective communication of empirical research findings. Students will need to see instructor for section assignments.

DEA 4590 Programming Methods in Design

Fall. 3 credits. Letter grades only. Minimum cost of materials: $100. L. Maxwell.

Introduction to facility programming. Emphasizes formulation of building requirements based on user characteristics and potential constraints. The course presents diverse methods for determining characteristics that will enable a particular environmental setting to support desired behaviors of users. The course emphasizes selection of appropriate methods to suit the specific user/client needs. Students work with an actual client to prepare a program document.

DEA 4600 Design City

Fall. 1 credit; may be repeated for credit. Prerequisite: DEA majors; permission of instructors. Not open to freshmen for credit. Students are required to take this course in order to participate in field study trip to a major city. Field trip fee covers cost of hotel and chartered bus; trip fee billed to student's bursar account. S–U grades only. Course fee: $120 (charged to bursar bill). K. Gibson and J. Jennings.

Field study of historic and contemporary interiors with guided tours to architectural and interior design firms, installations, exhibits, and showrooms in New York City, Toronto, or other major cities. Topics and themes change yearly.

DEA 4700 Applied Ergonomic Methods
Spring. 3 credits. Prerequisite: DEA 3250. Undergraduate sec of DEA 6700; shares lec but meets for an additional hour. DEA 6700 has additional readings and projects. A. Hedge.
Covers physical and cognitive ergonomic methods and techniques and their application to the design of modern work environments. Emphasizes understanding key concepts. Covers conceptual frameworks for ergonomic analysis, systems methods and processes, a repertoire of ergonomics methods, and techniques for the analysis of work activities and work systems.

DEA 4720 Environments for Elders: Housing and Design for an Aging Population
Spring. 3 credits. Field trip fee: $20. N. Wells.
Through seminars, lectures, field trips, and service learning opportunities, students examine the relationship between older adults and the physical environment. Students gain understanding of the relevance of design characteristics to the well-being of older people; an appreciation of late-life social, cognitive, and physiological changes; as well as familiarity with a variety of housing options for late life. Visit http://courses.cit.cornell.edu/dea4720.

DEA 4990 Senior Honors Thesis
Fall or spring. Variable credit. Prerequisite: permission of thesis advisor and DEA director of undergraduate studies. Letter grades only. DEA faculty.
Opportunity for DEA majors to undertake original research and scholarly work leading to the preparation of a thesis. Students work closely with their thesis advisor on a topic of interest.

DEA 6000–6030 Special Problems for Graduate Students
Fall or spring. Credit TBA. S–U or letter grades. DEA faculty.
Independent advanced work by graduate students recommended by their special committee chair and approved by the head of the department and instructor.

6000: Special Problems. For study of special problems in the areas of interior design, human environment relations, or facilities planning and management.

6010: Directed Readings. For study that predominantly involves library research and independent study.

6020: Graduate Empirical Research. For study that predominantly involves collection and analysis of research data.

6030: Graduate Practicum. For study that predominantly involves field experiences in community settings.

DEA 6250 Collaborative Sustainable Building Practice
Fall. 3 credits. Limited to 30 students. Recommended: DEA 2040. Letter grades only. Minimum cost of materials other than books: $50. Y. Hua.
Recognized by the USGBC Excellence in Green Building Curriculum Incentive, this course is designed to respond to the significant nontechnological barriers to the transformation of the building sector toward sustainable practice. Students are introduced to a series of forces and key players in the building delivery process that have different magnitudes of impact on the adoption of sustainable practice and the complex stakeholder network in the building life cycle. This course is intended for graduate students and senior undergraduate students from a wide range of majors related to the planning, design, construction, and management of buildings. Students in this course work with a professional producer to create a short movie to explore video as an engaging means of communicating.

[DEA 6450 Dancing Mind/Thinking Heart: Creative Problem-Solving Theory and Practice
Spring. 3 credits. Limited to 24 students. Prerequisite: graduate or advanced undergraduate standing; undergraduates must have permission of instructor. Next offered 2011–2012. S. Danko.
Focuses on thinking processes and techniques that support creative problem solving. Examines theories of creative behavior and critical thinking. The course is highly participatory and experiential by design. Weekly discussions include hands-on applications of theories on short problems tailored to the backgrounds of the students. The primary goal is to demonstrate perceptual, emotional, intellectual, cultural, and environmental blocks to creative thinking and expand the student's repertoire of creative problem solving strategies for use in day-to-day professional practice. Case studies of creative individuals and organizations from a variety of fields are presented.]

DEA 6480 Virtual Design, Analysis, and Representation
Fall. Variable credit; max. 4. Limited to 15 students. Prerequisite: graduate or advanced undergraduate standing; for undergraduates, DEA 3302 or permission of instructor. Minimum cost of materials: $150; lab fee: $35. K. Gibson.
Advanced use of computer technology to create and analyze interior environments. Emphasizes the use of 3-D modeling, animation, photorealistic rendering, and emerging technologies to investigate dynamic design issues.

DEA 6500 Programming Methods in Design
Fall. 4 credits. L. Maxwell.
Intended for graduate students in cooperation with DEA 4590. Each student is required to attend DEA 4590 lectures, complete all required readings and assignments, and meet with the instructor and with other graduate students. An additional programming project is required for all graduate students.

DEA 6510 Human Factors: Ergonomics-Anthropometrics
Fall. 4 credits. Recommended: DEA 1500 and 3-credit statistics course. A. Hedge.
Intended for graduate students who want a more thorough grounding in human factors than is provided by DEA 3250. Each student is required to attend DEA 3250 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For more detail, see DEA 3250.

DEA 6520 Human Factors: The Ambient Environment
Spring. 4 credits. Recommended: DEA 1500. A. Hedge.
Intended for graduate students who want a more thorough grounding in human factors considerations than is provided by DEA 3500. Each student is required to attend DEA 3500 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For detailed description, see DEA 3500.

DEA 6530 Planning and Managing the Workplace
Fall. 4 credits. Prerequisite: graduate standing. Letter grades only. F. Becker.
Through lectures, readings, and projects, this course explores how the planning, design, and management of health care facilities affects patients, care providers, and health care quality. Course emphasizes the role of evidence-based design and examines issues and challenges in generating, interpreting, and applying different forms of evidence to improve health care quality and patient and staff experience. The final project involves students using different forms of evidence to develop their own innovative solutions to design dilemmas typically faced in planning and designing a hospital.

DEA 6540 Facility Planning and Management Studio
Spring. 4 credits. Prerequisite: DEA 4590/6500 or permission of instructor. Letter grades only. Minimum cost of materials: $200. Y. Hua.
For graduate students interested in facility planning and management. For description, see DEA 3540.

DEA 6560 Research Methods in Social Sciences
Fall. 4 credits. N. Wells.
Intended for graduate students who want a more thorough understanding of the use of research in the social sciences. Course begins with fundamentals of research design and covers internal and external validity, measurement reliability and validity, and a variety of tools and techniques. Recommended for graduate students undertaking thesis or dissertation projects. Students will need to see instructor for section assignments.

DEA 6590 Introduction to Facility Planning and Management
Fall. 2 credits. For graduate students interested in careers in facility planning and management. Letter grades only. F. Becker.
Introduction to the field of facility planning and management. Course examines how the planning, design, and management of an organization's physical facilities can help it meet its business objectives. Through readings, lectures, and discussions, students become familiar with basic characteristics and issues of strategic planning, space planning and design, project management, building operations, workplace change management, real estate, and computer-aided facility management systems. Different approaches to sustainable facility design and issues in effectively managing and operating green facilities are explored in a term project working with organizations that have implemented sustainable designs, policies, and practices.

DEA 6610 Environments and Health
Spring. 3 credits. N. Wells.
Examines the impact of the physical environment on human health and well-being through the life course. Environmental factors examined include characteristics of the built and natural environment, housing, and

neighborhood, as well as sprawl, the dominance of the automobile, and patterns of American landscape development. Health outcomes include physical health, obesity, mental health, and cognitive functioning. Working within the life-course perspective, the course focuses particularly on environmental factors that may act as either protective mechanisms fostering the long-term resilience of individuals or risk factors contributing to long-term vulnerability.

DEA 6680 Design Theory and Criticism Seminar
Spring. 4 credits. Limited to 15 students. Letter grades only. J. Jennings.
For advanced undergraduate and graduate students. The seminar explores two methods of design thinking: theoretical and critical. One method stems from a desire to understand historical theory and to assess the relevance of theory as an intellectual basis for contemporary design. The other approach involves learning to write critically. Within this construct is the notion that every design is an argument a designer makes.

DEA 6700 Applied Ergonomics Methods
Spring. 4 credits. Limited to 20 students. Prerequisite: DEA 6510. A. Hedge.
Intended for graduate students who want a more thorough understanding of applied ergonomic methods than is provided by DEA 4700. Each student is required to attend DEA 4700 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For further detail, see DEA 4700.

DEA 6760 Universal Design: Ergonomics and Accessibility
Spring. 3 credits. Recommended prerequisite: DEA 1500, 3250, or 6510, or permission of instructor. S–U or letter grades (DEA Option III students must do letter grade). D. Feathers.
Universal design accommodates and fosters human function, preferences, choice, and identity through the design of the built environment. This course introduces the concepts of universal design from a human factors/ergonomics perspective and outlines precepts and regulations to support human-centered design decisions. Student projects emphasize evaluating the built environment from a universal design perspective.

DEA 7100 Graduate Pro Seminar
Fall or spring. 1 credit. S–U. DEA graduate faculty.
This pro seminar meets once per week, and consists of bi-weekly guest lectures from DEA, Cornell, and guest faculty members, as well as professionals from outside the university. The goal is to build research and professional practice skills in the context of real world applications.

DEA 8990 Master's Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S–U or letter grades. DEA graduate faculty.

DEA 9990 Ph.D. Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of doctoral thesis committee chair and instructor. S–U or letter grades. DEA Ph.D. graduate faculty.

FIBER SCIENCE & APPAREL DESIGN

A. Lemley, chair (209 MVR, 255-3151); M. Frey, director of graduate studies; C. Jirousek, director of undergraduate studies; S. Ashdown, C. C. Chu, C. Coffman, J. Hinestroza, V. D. Lewis, F. Mete, A. Netravali, S. K. Obendorf, A. Racine

FSAD 1140 Introduction to Computer-Aided Design
Spring. 3 credits. Limited to 14 students per sec. Priority given to FSAD students and those in transfer process to FSAD. S–U or letter grades. Minimum cost of materials: $100. A. Racine.
Explores the creative potential of microcomputers for fashion design. Uses AutoCAD software program as a design tool for drawing 2-D images. Introduces basic Photoshop software functions to enhance original drawings. Projects include creating full-scale engineered designs on fabric for digital printing in the studio, and a team-based fashion magazine.

FSAD 1170 Fashion Graphics
Fall. 3 credits. Limited to 21 students. Priority given to FSAD majors and transfer students. Prerequisite: basic drawing course. Letter grades only. Minimum cost of supplies: $200; lab fee: $30. V. D. Lewis.
Students develop both familiar and unfamiliar methods that enable them to visualize the fashioned body and ancillary expressions of fashion. Fashion graphics is explored as a communicative strategy essential in most aspects of fashion development.

FSAD 1250 Art, Design, and Visual Thinking
Fall. 3 credits. S–U or letter grades. C. Jirousek.
Introduction to the visual arts and design that explores aesthetic and cross-cultural dimensions of visual experience. Augmented by slide presentations, artifacts, video, and an Internet-based electronic textbook, lectures emphasize the varieties of visual expression seen in works of art and design. Discusses social, cultural, and historic interpretations of visual expression.

FSAD 1350 Fibers, Fabrics, and Finishes
Fall. 3 credits. FSAD majors must also enroll in FSAD 1360. S–U or letter grades. M. Frey.
Introduction to fibers, fibrous materials, and dyes and finishes. Gives special emphasis to the use of fibrous materials in apparel, residential and contract interiors, and industrial applications. Topics include fiber properties, fabric structure, coloration of fibrous materials, dimensional stability, flammability, product specifications, and performance standards.

FSAD 1360 Fiber and Yarn Analysis Laboratory
Fall. 1 credit. Corequisite: FSAD 1350. Letter grades only. M. Frey.
Consists of 14 laboratory sessions in which students learn techniques to identify and test fibers and yarns. A midterm and final exam are based on using the methods learned to identify an unknown fiber (midterm) and an unknown bi-component yarn (final).

FSAD 1450 Introduction to Fashion Design
Fall. 3 credits. Limited to 30 students; 15 per lab. Priority given to FSAD students and students transferring into FSAD. Prerequisite: FSAD 1140. Corequisites: FSAD 1350 and 1360. Letter grades only. Apparel design majors should take course during first year. Minimum cost of materials: $200. A. Racine.
Intensive study of principles and processes of flat-pattern design with emphasis on creative expression in upscale children's fashions. Through studio projects, students develop an understanding of the techniques needed to produce apparel from technical sketches, flat pattern design processes, and garment assembly.

FSAD 2370 Structural Fabric Design
Spring. 3 credits. Prerequisite: FSAD 1350. Recommended: college algebra. S–U or letter grades. M. Frey.
Covers the elements of technical fabric design with an emphasis on woven and knitted fabrics. Topics include structure of woven and knitted fabrics, openness, manufacturability, equivalence, and color effects.

FSAD 2640 Draping
Spring. 3 credits. Limited to 30 students; 15 per lab. Prerequisites: FSAD 1250 and 1450. Recommended: drawing course. Letter grades only. Minimum cost of materials: $250; lab fee: $50. S. Ashdown.
This studio course examines the process of creating a three-dimensional garment from the two-dimensional fabric. The principles and processes of draping, advanced flat-pattern making, and fitting are studied through projects. Drawing exercises focus on the communication of three-dimensional garments in two-dimensional sketches. Assigned problems require students to make judgments regarding the design process, the nature of materials, body structure, function, and fashion.

FSAD 2650 Patternmaking for Fashion Design
Fall. 3 credits. Limited to 30 students. Prerequisites: FSAD 1140, 1170, 1250, 1450, 1350, and 1360. Corequisite: FSAD 2370. Letter grades only. Minimum cost for fabrics, studio, and portfolio supplies: $250. A. Racine.
The goal of this apparel studio course is to expand student competencies in flat-pattern design, technical sketching, and fitting. Students generate original design concepts using fashion sources from historic to contemporary times. Advanced garment assembly and detailing techniques for fashion apparel with Sonobond Technology are introduced.

FSAD 2660 Apparel Design: Product Development
Fall. 3 credits. Prerequisites: FSAD 1140 and 1450. Recommended: drawing course. Letter grades only. Minimum cost of materials: $150; lab fee: $10. S. Ashdown.
Project-based course in which students explore the relationship between technology and design, and the impact of production issues on manufactured clothing. Students learn computer-aided patternmaking, grading, manufacturing technologies, communication of technical details, flats, specifications, and costing of garments. Designs are developed to various stagesv from conceptual work to full specification of the product and its production details, with a concentration on the iterative design process.

FSAD 3000 Special Studies for Undergraduates
Fall or spring. Credit TBA. Staff.
Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the college registrar's office. The form, signed by both the instructor directing the study and the department chair, is filed at course registration or during the change-of-registration period.

FSAD 3250 Color and Surface Design of Textiles
Fall. 3 credits. Limited to 18 students. Priority given to FSAD apparel design majors. Recommended: FSAD 1140 and 1350. Letter grades only. Minimum cost of materials: $100; lab fee: $100. C. Jirousek.
Studio experience in the surface design of textiles combined with exercises in color theory. Textile projects use techniques such as block printing, shibori, batik, silk painting, silk screen, and stitchery to produce a portfolio of textile designs. Studio work is augmented by lectures on pattern and color theory illustrated by slides and textile examples.

FSAD 3310 Apparel Production and Management
Fall. 3 credits. Limited to 40 students. Prerequisites: ECON 1110 and 1120 and upper-division course in either apparel or textiles. S-U or letter grades. Course fee: $10. F. Mete.
Introduction to the global textile and apparel industry, particularly the technical and economic aspects of apparel production and strategic management. Includes analysis of specific apparel manufacturing and management issues such as international sourcing strategies, Fast Fashion, Quick Response, mass customization, production and information technology, labor, and logistics. Students analyze and discuss case studies of creative individuals and organizations from a variety of fields that apply to the textile and apparel industry.

FSAD 3320 Product Quality Assessment
Fall. 3 credits. Limited to 36 students in lec, 18 per lab. Prerequisites: FSAD 1350 and statistics course. S-U or letter grades. Lab fee: $15. Staff.
Covers evaluation of fibers, yarns, fabrics, and garments, with emphases on the meaning of standards, testing philosophy, quality control, and statistical analysis. Discusses day-to-day tests done in the textile and apparel industry. Laboratory sections introduce students to various test methods, data generation for analysis, and evaluation.

FSAD 3350 Fiber Science
Fall. 3 credits. Limited to 20 students. Prerequisites: college chemistry and physics. S–U or letter grades. A. Netravali.
Covers fibers commonly used in various engineering, medical, and apparel applications. Topics include the nature of polymer molecules, the chemical structure of organic fibers, inorganic fibers, micro-macro structure of fibers, fiber dimensions, environmental effects, and mechanical, optical, thermal, and frictional properties of fibers. The following fiber uses are discussed: composites in aerospace and other structural components, circuit boards, bulletproof vests, sutures, artificial arteries, geotextiles, sporting goods, and others.

FSAD 3460 Design Process
Spring. 4 credits. Limited to 30 students. Priority given to FSAD majors and transfer students. Prerequisites: FSAD 1350, 1450, 2640, and 2650. Letter grades only. Minimum cost of materials: $250; lab fee: $10. V. D. Lewis.
Exposes students to dilemmas and methods used by creative fashion designers. Course ambitions are to develop personal design handwriting: unite a provocative design issue with the requirement of the market and functionality while emphasizing quality and creativity in realizing design ideas.

FSAD 3690 Style, Fashion, and the Apparel Industry
Spring. 2 credits. Limited to 30 students. Not open to freshmen. Prerequisites: FSAD 1250, 1350, and 2370. Students should not take FSAD 3690 and FSAD 3460 in same semester. Letter grades only. A. Racine.
Illustrated lectures focus on changes in the U.S. apparel industry and fashion cycles from the 19th century to the present day resulting from social forces, technological developments, and shifting demographics. The Cornell Costume Collection is used for discussion. Students write an original research paper on topics relating to changes in fashion over time.

FSAD 4000–4010–4020–4030 Special Independent Studies for Undergraduates
Fall, summer, or spring. Credit TBA. S–U or letter grades. Staff.
For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of FSAD not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration along with an add/drop slip in the college registrar's office (146 MVR). To ensure review before the close of the course registration or change-of-registration period, early submission of the special-studies form to the department chair is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

FSAD 4000: Directed Reading. For study that predominantly involves library research and independent reading.

FSAD 4010: Empirical Research. For study that predominantly involves data collection and analysis, or laboratory or studio projects.

FSAD 4020: Supervised Fieldwork. S–U grades only. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

FSAD 4030: Teaching Apprenticeships. Fall or spring. 2–4 credits. Prerequisites: upper-class standing, demonstrated high level of performance in subject to be taught and in overall academic program, and permission of instructor and department chair. S–U or letter grades. Staff. Apprenticeship includes both a study of teaching methods in the field and assisting the faculty with instruction.

FSAD 4200 History of Color and Design in Textiles
Spring. 3 credits. Prerequisite: FSAD 1250 or permission of instructor. S–U or letter grades. Offered alternate years. C. Jirousek.
Explores color theory principles, color trends, science and technology of color measurement, color and design in textile construction and embellishment, design use of pigments and dyes, and history of textile design as a designer resource. Students complete hands-on exercises, two exams, and a paper.

[FSAD 4360 Fiber Chemistry
Spring. 3 credits. Prerequisite: senior or first-year graduate standing. S–U or letter grades. Offered alternate years; next offered 2011–2012. C. C. Chu.
Focuses on the chemical and physical structure of several commercially important fibers and their polymerization process. Discusses color chemistry and relationship to fiber dyeing.]

FSAD 4390 Biomedical Materials and Devices for Human Body Repair (also BME 5390)
Spring. 2–3 credits. Prerequisites: junior or senior standing; college natural science requirement (chemistry or biology). S–U grades only for 2 credits, letter grades only for 3 credits. C. C. Chu.
Surveys materials and devices for repair of injured, diseased, or aged human tissues/organs. Includes properties of synthetic and biological materials, wound healing processes, medical devices for repair of wounds, blood vessels, hearts, joints, bones, nerves, male impotence, vision/hearing/voice, and drug control/release.

FSAD 4440 Global Fashion Management
Fall. 3 credits. Prerequisites: junior or senior standing; FSAD 1350 and marketing course. S–U or letter grades. F. Mete.
Overview of the business of design, production, distribution, marketing, and merchandising of apparel and related products from a management perspective. Includes the organization and structure of both domestic and international retailers along with pricing strategies, merchandise planning, inventory management, and sales promotion. New uses of computer systems and information technologies are emphasized throughout.

FSAD 4660 Textiles, Apparel, and Innovation
Fall. 3 credits. Prerequisite: FSAD 2370. Recommended: FSAD 4320. S–U or letter grades. Cost of field trip: $100. J. Hinestroza.
Designed for students in all FSAD options. Explores the relationship between materials and design with a concentration on the use of innovative textile materials in apparel. Both aesthetic and functional issues are addressed. The course consists of a combination of lecture, discussion of readings, oral reports, a research paper, and project work. There is a one-day field trip to New York City.

FSAD 4700 Fashion Presentation: Portfolio Development
Spring. 3 credits. Limited to 25 students. Priority given to FSAD majors and transfer students. Prerequisites: FSAD 1170, 2640, 2650, and 3460. Minimum cost of materials: $250. V. D. Lewis.

Students are expected to discover their personal philosophy of fashion and to discover and adopt current presentation techniques. Students gain an understanding of presentation methods currently used in fashion design, forecasting, and editorial illustration. Skills covered include fashion illustration, image manipulation, and photographic image, layout, and presentation.

FSAD 4990 Honors Thesis Research
Fall and spring. 4 credits each in fall and spring semesters of senior year. Prerequisites: minimum GPA of 3.3 and submission of application in junior year. S–U or letter grades. Staff.
The student prepares a thesis, based on independent research, including a research statement, background, approach, results (which could be a description of a creative work), and discussion. The student may also produce creative work. Students make an open presentation of work, either a seminar or an exhibition, and an oral defense with the committee. Interested students should obtain a FSAD Honors Program application form from the FSAD undergraduate office (207 MVR) and submit the application to the department before the end of the fall semester of junior year. For more information students should contact the director of undergraduate studies.

FSAD 6000 Special Problems for Graduate Students
Fall or spring. Credit TBA. S–U or letter grades. Staff.
Independent advanced work by graduate students recommended by their chair and approved by the department chair and instructor.

[FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers
Fall. 3 credits. S–U or letter grades. Offered alternate years; next offered 2011–2012. J. Hinestroza.
Introduction to dynamic mechanical analysis and its relevance in the characterization of polymer fibers and films.]

FSAD 6200 Physical Properties of Fiber-Forming Polymers and Fibers
Spring. 3 credits. Prerequisite: permission of instructor. Offered alternate years. A. Netravali.
Covers formation and properties of fiber-forming polymers; rubbery, glassy, and crystalline states; and their interconnection. Discusses fiber structure; relationship between chemical structure and physical properties of manufactured and natural fibers; mechanical, thermal, and viscoelastic properties of fibers; and testing methods.

FSAD 6260 The Chemistry of Textile Finishes and Dyeing
Spring. 3 credits. Prerequisites: organic chemistry course or permission of instructor. S–U or letter grades. Offered alternate years. C. C. Chu.
Discusses chemical aspects of textiles with emphasis on finishes and dyeing. Examines industrially important textile chemicals used for dyeing and enhancing fiber and fabric properties, such as durable press, anti-soiling, and water repellency. Emphasizes the correlation of the observed effect with chemical structure, end-user influences, interaction with fabric and fibers, sources, and synthetic routes. Briefly discusses the environmental effect of these textile chemicals and current federal regulation.

FSAD 6370 Research Seminars in Apparel Design
Fall and spring. 1 credit; repeat of course each semester encouraged for all apparel design graduate students. Prerequisites: permission of individual instructor for advanced undergraduates. S–U grades only. Apparel Design faculty.

FSAD 6390 Properties of Fibrous Systems
Fall. 3 credits. Prerequisite: solid mechanics course or permission of instructor. S–U or letter grades. Offered alternate years. J. Hinestroza.
Through lectures, readings, discussion, presentations, and project work this course explores the relationships among fiber structures and their mechanical, chemical, electric and frictional properties. Intensive reading and criticism of peer-reviewed articles is required as well as a weekly presentations. Every week students are assigned two papers for thorough review. The students are divided into two groups randomly chosen. Each group makes a detailed presentation of a paper and the second group criticizes the paper.

FSAD 6640 Human Factors: Anthropometrics and Apparel
Fall. 3 credits. Open to advanced undergraduates. Prerequisites: statistics course and permission of instructor. S–U or letter grades. Offered alternate years. S. Ashdown.
Seminar that focuses on the human form and its relationship to clothing. Includes readings and discussion of quantification of body sizes and human variation; historical, cultural, and aesthetic concepts of fit; apparel sizing techniques; national and international sizing systems and standards; and the impact of new technologies such as body scanning on sizing and fit issues. Students use the 3-D body scanner to investigate an issue related to these topics.

[FSAD 6660 Fiber Formation: Theory and Practice
Spring. 3 credits. Prerequisites: polymer chemistry, college physics, FSAD 4360, 6200, or permission of instructor. S–U or letter grades. Offered alternate years; next offered 2011–2012. M. Frey.
Covers the practical and theoretical analysis of the chemical and physical principles of the methods of converting bulk polymer to fiber.]

[FSAD 6700 Fashion Theory
Spring. 3 credits. Limited to 25 students. Priority given to FSAD majors and transfer students. Prerequisite: FSAD 3460 for undergraduates or similar course for graduates. Letter grades only. Offered alternate years; next offered 2011–2012. Minimum cost of materials: $250. V. D. Lewis.
Provides students with the theoretical tools to enable them to conduct debates and create strategy about the design of fashion.]

FSAD 6720 Creative Problem-Solving in Apparel Design
Spring. 3 credits. Prerequisites: graduate or advanced undergraduate standing; for undergraduates, permission of instructor. Recommended: upper-level courses in apparel design. Offered alternate years. F. Mete.
Focuses on concept-based problem-solving processes in creative apparel design. Approaches apparel design problems as a change process in design variables and concepts. Students learn by observing, recording, and analyzing their own design activity while they are applying a process of inquiry, experimentation, and research. Students present their end products and documented creative processes to a jury.

[FSAD 6750 Aesthetics and Meaning in World Dress
Spring. 3 credits. Prerequisite: FSAD 1250 or course in history of art, costume history, or other history. S-U or letter grades. Offered alternate years; next offered 2011–2012. C. Jirousek.
Examines the aesthetic and social/psychological relationship between body and clothing in the context of various cultures.]

FSAD 8990 Master's Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S–U or letter grades. Staff.

FSAD 9990 Doctoral Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S–U or letter grades. Staff.

HUMAN DEVELOPMENT

R. Savin-Williams, chair; B. Koslowski, director of graduate studies; E. Wethington, director of undergraduate studies; C. Brainerd, M. Casasola, S. Ceci, R. Depue, J. Eckenrode, G. Evans, S. Hamilton, C. Hazan, T. Kushnir, C. Loeckenhoff, B. Lust, A. Ong, K. Pillemer, V. Reyna, S. Robertson, C. Schelhas-Miller, Q. Wang, W. Williams. Emeritus: J. Brumberg, M. Cochran, H. Ricciuti

HD 1150 Human Development: Infancy and Childhood
Fall or summer. 3 credits. S–U or letter grades. C. Schelhas-Miller.
Introduces students to the basic concepts, theories, and research in human development as they explain prenatal development and development in infancy and childhood. The focus is on individual development from an interdisciplinary perspective with an emphasis on psychological development, but also drawing from the fields of sociology, history, biology, anthropology, and education.

HD 1160 Section for Infancy and Childhood
Fall or summer. 1 credit. Enrollment in fall limited to HD majors. Enrollment in fall and summer limited to students enrolled in HD 1150. Letter grades only. C. Schelhas-Miller.
Provides an opportunity to discuss material in more depth in a small group. Students learn to read and critique empirical research articles and discuss the application and policy implications of course topics.

HD 1170 Human Development: Adolescence and Emerging Adulthood
Spring. 3 credits. S–U or letter grades. C. Schelhas-Miller.
Broad overview of theories, research, and issues in the study of human development during adolescence and emerging adulthood. Focuses on the major biological, cognitive, and social changes during adolescence; the psychosocial issues of adolescence, including identity, autonomy, intimacy, sexuality, achievement, and problems; and the contexts in which adolescent development occurs,

particularly families, peer groups, schools, work, and popular culture. Discusses empirical research, theories, case studies of the lives of real adolescents, and, to a lesser degree, public policies.

HD 1710 The Black Family and the Socialization of Black Children (also ASRC 1600)
Fall. 3 credits. Letter grades only. T. Gosa.
For description, see ASRC 1160.

HD 2180 Human Development: Adulthood and Aging
Spring. 3 credits: Prerequisite: HD 1150 or HD 1170. S–U or letter grades. C. Loeckenhoff.
General introduction to theories and research in adult development and aging. Discusses psychological, social, and biological changes from youth through late adulthood. Emphasizes both individual development within generations and differences among generations.

HD 2200 The Human Brain and Mind: Biological Issues in Human Development (also COGST 2200)
Spring. 3 credits. Prerequisite: HD 1150 or PSYCH 1101. S–U or letter grades. B. Ganzel.

HD 2300 Cognitive Development (also COGST 2300)
Fall. 3 credits. Prerequisite: HD 1150 or PSYCH 1101. T. Kushnir.
Surveys current theory and research on various aspects of cognitive development across the life span, with emphasis on infancy and early childhood. Topics include perception, representation and concepts, reasoning and problem solving, social cognition, memory, metacognition, language and thought, and academic skills. Students develop a broad understanding of the mechanisms, processes, and current issues in cognitive development and learn to critically assess developmental research. The course is a combination of lecture, seminar, and fieldwork.

[HD 2380 Thinking and Reasoning (also COGST 2380)
Fall. 3 credits. Prerequisite: HD 1150, HD 1170, or PSYCH 1101. Next offered 2011–2012. B. Koslowski.
Examines problem solving, transfer, and creativity; pre-causal and causal reasoning; models of good thinking based on formal logic, pragmatic syllogisms, and probability theory; expert–novice differences; cognition and attitudes; extra-rational and magical beliefs; and putative racial and social class differences in intelligence.]

HD 2510 Social Gerontology: Aging and the Life Course (also SOC 2510)
Spring. 3 credits. Prerequisites: one of the following: HD 1150, HD 1170, SOC 1101, DSOC 1101, or PSYCH 1101. S–U or letter grades. E. Wethington.
Analyzes the social aspects of aging in contemporary American society from a life-course perspective. Topics include (1) an introduction to the field of gerontology, its history, theories, and research methods; (2) a brief overview of the physiological and psychological changes that accompany aging; (3) an analysis of the contexts (e.g., family, friends, social support, employment, volunteer work) in which individual aging occurs, including differences of gender, ethnicity, and social class; and (4) the influences of society on the aging individual.

HD 2600 Introduction to Personality (also PSYCH 2750)
Fall. 3 credits. Recommended: introductory psychology or human development course. V. Zayas.
For description, see PSYCH 2750.

HD 2610 The Development of Social Behavior (also PSYCH 2610)
Fall. 3 credits. Highly recommended: introductory psychology or human development course. Staff.
Examines issues in the development of social behavior from the perspective of theory and research. Likely topics include bases of social behavior across the life span, the role of parents, siblings, and peers, the development of prosocial and aggressive behavior, the development and functioning of attitude and value systems, moral development, emotional development, and the function and limits of experimental research in the study of social development.

HD 2820 Community Outreach (also PSYCH 2820)
Fall. 2 credits. Prerequisites: HD 1150 or PSYCH 1101. Students may not register concurrently with HD 3270 or PSYCH 3270 or 3280. Letter grades only. H. Segal.
For description, see PSYCH 2820.

HD 3110 Educational Psychology (also EDUC 3110)
Fall. 4 credits. S–U or letter grades. D. Schrader.
For description, see EDUC 3110.

[HD 3190 Memory and the Law
Fall. 3 credits. Prerequisites: HD 1150, HD 1170, PSYCH 1101, HD 2330, or PSYCH 2650. S–U or letter grades. Next offered 2011–2012. C. Brainerd.
Focuses on how the scientific study of human memory interfaces with the theory and practice of law.]

HD 3200 Human Developmental Neuropsychology
Spring. 3 credits. Prerequisite: HD 2200 or PSYCH 2230 or BIONB 2220. S–U or letter grades. B. Ganzel.

HD 3270 Field Practicum I (also PSYCH 3270)
Fall. 3 credits. Limited to 30 students. Students must commit to taking HD 3280 in spring semester. Prerequisites: HD 3700 or PSYCH 3250 and permission of instructor. Letter grades only. H. Segal.
For description, see PSYCH 3270.

HD 3280 Field Practicum II (also PSYCH 3280)
Spring. 3 credits. Limited to 30 students. Prerequisites: HD 3270/PSYCH 3270 taken previous semester, PSYCH 3250 or HD 3700, and permission of instructor. Letter grades only. H. Segal.
For description, see PSYCH 3280.

[HD 3330 Children and the Law
Fall. 3 credits. Prerequisite: HD 1150. Next offered 2011–2012. S. Ceci.
Examines psychological data and theories that shed light on the practical issues that arise when children enter the legal arena.]

[HD 3340 The Growth of the Mind (also COGST 3340)
Spring. 4 credits. Recommended: course in human experimental psychology, statistics, or HD 1150 or equivalent, or permission of instructor. S–U or letter grades. Next offered 2011–2012. B. Lust.
Introduces the fundamental issues of cognition. Basic debates within the study of cognition are introduced and discussed throughout.]

HD 3370 Language Development (also COGST 3370, PSYCH 4360, LING 4436)
Spring. 4 credits. Open to undergraduate and graduate students. Supplemental lab course available (HD 4370, PSYCH 4370, COGST/LING 4500). Graduate students also should enroll in HD 6370, LING 7000, supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, neurobiology, biology, or linguistics. S–U grades optional. B. Lust.
Surveys basic issues, methods, and research in the study of first-language acquisition. Considers major theoretical positions in the field in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental issues of relationships between language and thought are discussed, as are the fundamental linguistic issues of "Universal Grammar" and the biological foundations for language acquisition. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child.

HD 3380 Social Cognition and Development
Fall. 3 credits. Prerequisite: HD 1150. Recommended: HD 2300 and a statistics course. Letter grades only. Offered alternate years. Q. Wang.
Offered to students interested in children's thinking pertaining to themselves and their social world. The course encompasses cutting-edge developmental research on social cognition in social neuropsychology, experimental social-cognitive psychology, and cultural psychology. The course examines major theories and empirical findings on a wide range of topics, including the self, theory of mind, autobiographical memory, emotion cognition, moral reasoning, concept of learning, intergroup bias, peer perception, and more. These social-cognitive faculties represent universal human capacity with neurological underpinnings as well as culture-specific competence that enables children to effectively navigate in their social world.

[HD 3420 Participation with Groups of Young Children
Fall. 4 credits. Limited to 25 students. Prerequisites: HD 1150 and contact with instructor to arrange placement hours. S–U or letter grades. Next offered 2011–2012. Staff.
Designed to integrate developmental theories with supervised experience in local care and educational contexts for young children.]

[HD 3430 Social Worlds of Childhood
Spring. 4 credits. Limited to 25 students. Prerequisite: HD 1150. S–U or letter grades. Next offered 2011–2012. Staff.
Explores the nature, quality, and impact of relationships of school-age children (ages 5–11) in multiple contexts (e.g. school, home, community).]

HD 3440 Infant Behavior and Development
Fall. 3 credits. Limited to 60 students. Not open to freshmen. Prerequisites: HD 1150, biology course, and statistics course. S. Robertson.

Examines behavior and development from conception through the first two years of life in traditional areas (e.g., perception, cognition, socioemotional theory, language, motor function). Strongly emphasizes the fundamental interconnectedness of these aspects of development as well as their relation to the biology of fetal and infant development. Emphasizes topics with implications for general theories of development (e.g., the functional significance of early behavior, the nature of continuity and change, and the role of the environment in development). Also describes conditions that put infants at risk for poor development (e.g., premature birth, exposure to environmental toxins, maternal depression) and topics with current social, ethical, or political implications (e.g., infant day care, fetal rights). Research methodology in the study of early behavior and development is emphasized throughout the course.

HD 3460 The Role and Meaning of Play

Spring. 3 credits. Limited to 45 students. Prerequisite: junior or senior standing; HD 1150. E. Stilwell.

Examines the play of children ages three through seven. Through seminar discussions, workshops, videos, and individualized research students explore the meaning and validity of play in the lives of young children, the different ways that children play and the value of each, and the effect of the environment in enhancing and supporting play.

HD 3470 Human Growth and Development: Biological and Behavioral Interactions (also BSOC 3471, NS 3470)

Spring. 3 credits. Limited to 150 students. Prerequisites: BIOG 1101 or 1109 or equivalent, and HD 1150 or PSYCH 1101. Offered alternate years. S. Robertson and J. Haas.

Concerned with the interrelationships of physical and psychological growth and development in humans during infancy. Considers intrinsic and extrinsic causes of variations in growth, including various forms of stimulation. Also examines the consequences of early growth and its variations for current and subsequent behavioral, psychological, and physical development. The interaction between physical and behavioral or psychological factors is emphasized throughout the course.

HD 3490 Positive Psychology

Fall and spring. 3 credits. Limited to 120 students. Prerequisites: HD 1150 or HD 1170 or PSYCH 1101 and HD 2600/PSYCH 2750 or HD 2610 or PSYCH 2800. S–U or letter grades. A. Ong.

Takes a comprehensive look at current research and theory in the emerging field of Positive Psychology. Students become familiar with theories, methods, and empirical research pertaining to the psychology of human strengths, virtues, abilities, and talents.

HD 3530 Risk and Opportunity Factors in Childhood and Adolescence

Fall. 3 credits. Limited to 100 students. Prerequisites: HD 1150 or HD 1170. S–U or letter grades. J. Whitlock.

Explores the meaning of risk and opportunity in the lives of children and youth. Begins with a brief history of the social construction of childhood and adolescence and moves into identification of the core concepts associated with risk accumulation and resilience. Uses case studies, large and small group discussion, and policy debates to explore central concepts as they relate to social policy, professional practice, and community development. Assignments include integrative reflection papers on course material, quizzes, and participation in a simulated public-policy debate.

[HD 3570 Social Inequalities in Physical and Mental Health (also SOC 3670)

Fall. 3 credits. Limited to 120 students. Prerequisites: HD 1150, or HD 1170, PSYCH 1101, HD/SOC 2510, DSOC 1101, or SOC 1010. S–U or letter grades. Next offered 2011–2012. E. Wethington.

Introduction to physical and mental health inequalities in the United States, the causes of these inequalities, and their impact on individual development across the life course.]

HD 3620 Human Bonding

Spring. 3 credits. Limited to 600 students. Recommended: introductory psychology or human development course. S–U or letter grades. C. Hazan.

Covers the science of interpersonal relationships. Examines the basic nature of human affectional bonds, including their functions and dynamics. Covers such topics as interpersonal attraction and mate selection, intimacy and commitment, love and sex, jealousy and loneliness, the neurobiology of affiliation and attachment, and the role of relationships in physical and psychological health.

HD 3660 Affective and Social Neuroscience

Spring. 3 credits. Prerequisites: HD 2200 or PSYCH 2230/4600 or BIONB 2220. Letter grades only. R. Depue.

Focuses on networks of brain regions that are organized around the integration of processes related to emotion and motivation. The course first explores brain pathways for processing visual, auditory, body and face movements, and tactile stimuli that comprise the raw material used to judge the emotional significance of external events. Next, brain regions involved in the (1) emotional evaluation of that sensory input, and (2) emotional expression once a significant event is identified are described. Then, brain processes underlying the special nature of human emotional experience (subjective feelings) are explored. All of these basic emotional processes are extended by placing them within widespread brain networks that modulate emotional behavior. There is an emphasis on social contexts and the development of social emotions, including social bonding and social rejection. The manner in which emotional stress influences learning and memory, with implications for PTSD, concludes the course.

HD 3700 Adult Psychopathology (also PSYCH 3250)

Spring. 3 credits. Prerequisites: sophomore, junior, or senior standing; any course in psychology or human development. H. Segal.

For description see PSYCH 3250.

HD 3820 Research Methods in Human Development

Spring. 3 credits. Prerequisite: HD 1150 or HD 1170. Highly recommended: background in statistics. Letter grades only. M. Casasola.

Students learn about a variety of research methodologies and gain firsthand experience in conducting all aspects of a research project. Students design and conduct one descriptive and one experimental study. They also gain experience in using statistical software to analyze data.

HD 3840 Gender and Sexual Minorities (also FGSS 3850)

Fall. 3 credits. Prerequisite: social science course. S–U or letter grades. K. Cohen.

Introduces students to theories, empirical scholarship, and current controversies regarding lesbian, gay, bisexual, transgender, sexually questioning, and other gender and sexual minority populations. The major focus is on sexual development, lifestyles, and communities with additional coverage of ethnic, racial, and gender issues. Videos supplement readings and lectures.

HD 4000–4010–4020–4030 Special Studies for Undergraduates

Fall or spring. Credit TBA; 1–4. Prerequisite: permission of instructor. S–U or letter grades.

For advanced independent study by an individual student or for study with a group of students in a field of HD not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the department office in G77 MVR. This form must be signed by the instructor directing the study and the student's faculty advisor and submitted to G77 MVR, the Office of Undergraduate Education. After the form is approved, the student takes it to the college registrar's office, 146 MVR. To ensure review before the close of the periods, early submission of the special studies form to the Office of Undergraduate Education is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

4000: Directed Readings. Prerequisite: permission of instructor. For study that predominantly involves library research and independent study.

4010: Empirical Research. Prerequisite: permission of instructor. For study that predominantly involves data collection and analysis, or laboratory or studio projects.

4020: Supervised Fieldwork. Prerequisite: permission of instructor. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

4030: Teaching Assistantship. Prerequisites: permission of instructor; juniors and seniors with minimum 3.0 GPA; either HD 1150, or PSYCH 1101, and two intermediate-level HD courses, or equivalent courses in psychology or sociology. Students must have taken course and received B+ or higher. For study that includes assisting faculty with instruction.

[HD 4140 Social and Psychological Aspects of the Death Penalty

Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing and HD 1150 or HD 1170 and HD 3330 or PSYCH 2650. S–U or letter grades. Next offered 2011–2012. C. Brainerd.

Focuses on how the field of human development contributes to death penalty cases through the creation of social history reports on death-qualified defendants.]

[HD 4180 Aging: Contemporary Issues
Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 2180 or HD 2510 or permission of instructor. Letter grades only. Next offered 2011–2012. Staff.
Seminar addressing major issues and controversies in the field of aging. Designed for upper-level students who wish to pursue an in-depth analysis of concepts such as "successful" aging and wisdom.]

[HD 4190 Midlife Development
Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 2180 or HD 2510 or permission of instructor. Letter grades only. Offered alternate years; next offered 2011–2012. A. Ong.
Examines the burgeoning research literature on adult development during midlife. Focuses on research and theory examining psychological changes during middle adulthood such as relativistic and dialectical thinking, personality, identity, and sense of control.]

[HD 4200 Risk and Rational Decision Making
Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing and HD 1150 or HD 1170 and HD 3330 or PSYCH 2650 or PSYCH 2800. S–U or letter grades. Next offered 2011–2012. V. Reyna.
Offers a hands-on introduction to research and laboratory techniques that address topics in risk and rational decision making in human development from multiple disciplinary perspectives.]

[HD 4220 Research in Emotion and Cognition
Fall. 4 credits. Limited to 20 students. Prerequisites: HD 1150 or HD 1170 or PSYCH 1101 AND HD 2610 or HD 2600; permission of instructor. Next offered 2011–2012. Staff.
Focuses on age-related changes in emotion and cognition.]

[HD 4230 Research in Children's Testimony: Exploring Social and Cognitive Mechanisms
Fall. 4 credits. Limited to 20 students. Prerequisites: HD 1150 or PSYCH 1101 AND an introductory course in statistics, and permission of instructor. Next offered 2011–2012. S. Ceci.
Laboratory-based research that exposes students to the research process in the area of children's testimonial competence.]

HD 4240 Stress, Emotions, and Health (also COGST 4340)
Fall. 4 credits. Limited to 20 students. Prerequisites: HD 1150 or HD 1170 or PSYCH 1101 AND HD 2610 or HD 2600 and permission of instructor. A. Ong.
Reviews theory and research on stress, emotions, and health. This course offers opportunities for students to develop new ways to integrate theory and research on stress and health with the advances in the science of affect and emotion. In this course, undergraduate students attend a weekly lab meeting for 1.25 hours per week, read pertinent papers, write reaction responses, and work 10.75 hours per week in the laboratory completing tasks that contribute to ongoing research studies.

HD 4250 Translational Research on Decision Making
Fall. 4 credits. Limited to 20 students. Prerequisites: HD 1150 or HD 1170 or PSYCH 1101 AND HD 2610 or HD 2600. V. Reyna.
Introductory laboratory-based course focusing on basic foundations in translational research on decision making across the lifespan. The course introduces students to hands-on applications of research skills in the context of research on decision making, spanning basic and applied research in law, medicine, behavioral economics, and policy. It focuses on such topics as human subjects protection, working with populations across the life span (e.g., children, seniors), database development, working with external partners and stakeholders (e.g., schools, hospitals), and basic concepts and techniques in decision research. Students participate in weekly laboratory meetings in small teams focused on specific projects as well as monthly meetings in which all teams participate. During laboratory meetings, students discuss ongoing research, plans for new studies, and interpretations of empirical findings from studies that are in progress or have been recently completed. New students work closely with experienced students and eventually work more independently. In order to fully grasp how the research projects fit into the broader field, students read relevant papers weekly and write reaction responses. Because several projects are ongoing at all times, students have the opportunity to be involved in more than one study and are assigned multiple tasks such as piloting research paradigms, subject recruitment, data collection, data analysis, and data entry. Students attend a weekly lab meeting for 1.5 hours per week, read pertinent papers, write reaction responses, and work 10.5 hours per week in the laboratory completing tasks that contribute to ongoing research studies.

[HD 4260 Translational Research on Memory and Neuroscience
Spring. 4 credits. Limited to 20 students. Prerequisite: HD 1150 or HD 1170 or PSYCH 1101 AND HD 2610 or HD 2600. Next offered 2011–2012. C. Brainerd.
Laboratory-based course focusing on basic foundations in translational research on the neuroscience of human memory and memory development.]

HD 4270 Entering a Virtual Linguistic Lab: New Cybertools for the Scientific Study of Language Acquisition (also COGST 4275, LING 4270)
Spring. 4 credits. Prerequisite: instructor permission required. S–U or letter grades. B. Lust.
Students learn principles and procedures for the scientific and collaborative study of language acquisition, empowered by new possibilities offered by current cyberinfrastructure. Several new cybertools to aid the study of language acquisition are introduced, as well as principles and best practices for research through their use. A series of web conferences link Cornell language acquisition labs with other labs across the country. A hands-on component involves students in development of their role in collaborative research, including research design, analyses, and data management.

HD 4280 Research on Healthy Aging
Fall. 4 credits. Prerequisites: HD 1150 or PSYCH 1101 AND one of the following: HD 2180, HD 2510, HD 2610, or HD 2600. Recommended: statistics course. S–U or letter grades. C. Loeckenhoff.
This laboratory-based class focuses on age differences in personality traits, emotional experiences, and social relations, and their effect on health-related behaviors and outcomes. It allows students to gather hands-on experience with various research skills. Students attend weekly lab meetings (1.25 hours), write reaction responses to assigned readings, and contribute 10.75 hours/week to laboratory-related tasks.

HD 4310 Mind, Self, and Emotion: Research Seminar (also AAS 4310, COGST 4350)
Spring. 3 credits. Limited to 20 students. Prerequisites: upper-class undergraduate or graduate standing; HD 1150 or HD 1170 or PSYCH 1010; and permission of instructor. Letter grades only. Offered alternate years. Q. Wang.
Offered to students who are currently conducting research or planning to do research in the near future on one of the three topics—memory, self, or emotion. The course examines current data and theories concerning the topics from a variety of perspectives and at multiple levels of analysis, particularly focusing on the interconnections among these fields of inquiry. The "scale of observation" is viewed as occurring within the person (brain mechanisms, including genetics), at the level of the person (content-goals, beliefs, desires, etc.), and between persons (relationships and group interaction—including culture).

[HD 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning (also COGST 4320)
Spring. 3 credits. Limited to 20 students (14 HD 4320, 6 COGST 4320). Prerequisites: junior or senior standing; HD 1150 or HD 1170 or PSYCH 1101 or permission of instructor. S–U or letter grades. Next offered 2011–2012. B. Koslowski.
The basic premise of this course is that scientific reasoning is not restricted to scientists but is continuous with good reasoning in general. It examines not only how people reason, but also the extent to which their reasoning is either flawed or appropriate.]

HD 4330 Developmental Cognitive Neuroscience (also COGST 4330)
Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 2200 or PSYCH 2230, BIONB 2220. S–U or letter grades. B. Ganzel.
What are the brain mechanisms underlying human behavior and cognition? How do those underlying brain mechanisms develop? These are the questions that developmental cognitive neuroscience tries to address and those explored in this course. The course explores methods used in the field (including brain imaging techniques), recent findings on the development of brain mechanisms underlying human behaviors such as language, attention, and memory, as well as the brain mechanisms that may underlie various developmental disorders such as developmental dyslexia, autism, and attention deficit (hyperactive) disorder (AD[H]D). Emphasis is on reading primary research literature and acquiring the skills to understand, critique, discuss, and

write about primary research. The format includes lecture and discussion.

[HD 4340 Current Topics in Cognitive Development (also COGST 4340)
Spring. 3 credits. Limited to 20 students. Prerequisite: HD/COGST 3340 or permission of instructor. S–U or letter grades. Next offered 2011–2012. B. Lust.
Supplements survey course HD/COGST 3340 with additional discussion of current research in the area of cognitive development.]

HD 4370 Lab Course: Language Development (also COGST 4500, LING 4450, PSYCH 4370)
Fall. 4 credits. Limited to 20 students. Prerequisite: HD/COGST/PSYCH/LING 3370 or equivalent. B. Lust.
Optional supplement to the survey course Language Development (COGST/HD/LING/PSYCH 3370). The lab course provides students with a hands-on introduction to scientific research, including design and methods, in the area of first-language acquisition.

[HD 4440 Internship in Educational Settings for Children
Fall or spring. 8–12 credits. Prerequisites: HD 1150, 3420 or 3430, and 3480; permission of instructor. Recommended: HD 3460. S–U or letter grades. Next offered 2011–2012. Staff.
Offers an opportunity to integrate theory with practice at an advanced level and to further develop understanding of children ages 2 to 10 and their families.]

[HD 4480 Advanced Participation with Children
Spring. 4–8 credits. Limited to 20 students (depending on availability of placements and supervision). Prerequisites: HD 1150 and 3420 or 3430 and permission of instructor. Recommended: HD 3460. S–U or letter grades. Next offered 2011–2012. Staff.
Supervised field-based course designed to help students deepen and consolidate their understanding of children.]

HD 4490 Children's Learning in Social Context
Spring. 3 credits. Prerequisites: HD 2300 or course in early childhood (e.g., HD 1150 or PSYCH 2090) PLUS course in cognitive development (e.g., HD 2380). S–U or letter grades. T. Kushnir.
Focuses on the role of social knowledge and social context in early cognitive and language development. Topics include learning and social cognition, parent-child conversations, collaborative learning, formal instruction, individual and cultural differences, and implications for education. Observations of young children are part of the course.

[HD 4520 Culture and Human Development (also AAS/COGST 4520)
Spring. 3 credits. Limited to 20 students. Prerequisite: HD 1150 or HD 1170 or PSYCH 1101. Open to undergraduate and graduate students. Letter grades only. Offered alternate years; next offered 2011–2012. Q. Wang.
Takes an interdisciplinary approach to address the central role of culture in human development. Draws on diverse theoretical perspectives.]

[HD 4570 Health and Social Behavior (also SOC 4570)
Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; statistics course and *one* of the following: HD 2500, SOC/DSOC 1101, or HD/SOC 2510. Letter grades only. Offered alternate years. Next offered 2011–2012. E. Wethington.
Critically examines theories and empirical research on the relationships among social group membership, social status, and physical and mental health.]

[HD 4590 Transitions Across the Life Span
Fall. 3 credits. Prerequisites: junior or senior standing, HD 2180, HD 2510, or permission of instructor. Enrollment limited to 20 students. Next offered 2011–2012. C. Loeckenhoff.
Seminar-style course focusing on major normative and non-normative transitions that people encounter from late adolescence to advanced old age.]

[HD 4640 Adolescent Sexuality (also FGSS 4670)]

HD 4660 Psychobiology of Temperament and Personality
Fall. 3 credits. Limited to 20 students. Prerequisite: HD 3660 and permission of instructor. Letter grades only. R. Depue.
Seminar oriented to students planning to enter either a Ph.D. program in biological aspects of psychology or an M.D. program. It relies on basic research literature that requires detailed studying. The development of neurobehavioral systems as a means of adapting to critical stimuli has formed the basis of emotional systems in humans, and individual differences in these systems form the basis of temperament and personality. The nature of temperament and personality is explored from psychometric, experiential, genetic, and neurobiological points of view. There is a focus on the general role played by the biogenic amines (dopamine, norepinephrine, and serotonin), neuropeptides (corticotrophin releasing hormone, opiates, oxytocin), genetic polymorphisms in these neuromodulators, and early experience in determining individual differences in temperament and personality. The manner in which these biological factors influence the encoding of experience is explored as the basis of stability in personality traits.

HD 4680 Stress in Childhood and Adolescence
Spring. 3 credits. Limited to 20 students. Prerequisite: junior or senior standing. Recommended: HD 1150 or HD 1170 and a statistics course. Letter grades only. J. Eckenrode.
Advanced seminar that reviews research related to the nature and consequences of stressful experiences in childhood and adolescence, particularly those arising in the family. Topics represent common stressors in the lives of children (e.g., divorce of parents) that have potentially damaging consequences for development. Also covers topics in which Cornell faculty members have conducted significant research (e.g., child abuse and neglect). In addition to considering the negative effect of stress on development, also considers issues of individual differences in stress reactivity, including the concepts of coping and resilience. These topics lead naturally into discussions of practice and policy.

[HD 4740 Autism and the Development of Social Cognition
Fall. 3 credits. Limited to 20 seniors and juniors. Prerequisites: one statistics course AND either BIONB 2220 OR one course in neuroscience numbered 3000 or above (e.g., HD 3660 or PSYCH 3320 or 4250). S–U or letter grades. Next offered 2011–2012. Staff.
Seminar covering current psychological and neurobiological theories of autism, emphasizing written analysis and critical review of the primary research literature.]

HD 4780 Attention Deficit/Hyperactivity Disorder in Children
Spring. 3 credits. Limited to 15 students. Prerequisites: HD 1150 or equivalent, introductory biology, statistics course. S–U or letter grades. S. Robertson.
This seminar examines in detail the nature, diagnosis, epidemiology, causes, and treatment of ADHD through a critical evaluation of the recent scientific and medical literature. Also considers implications for families, schools, and society.

HD 4980 Senior Honors Seminar
Fall and spring. 1 credit. Requirement for and limited to seniors in HD honors program. S–U grades only. M. Casasola.
In this weekly seminar, students are guided through the process of completing an honors thesis in human development. The course focuses on developing students' writing abilities, reviewing statistics and how to present research findings in a manuscript, and receiving feedback on drafts of their thesis, as well as practice presenting the results of their thesis in poster and oral presentations.

HD 4990 Senior Honors Thesis
Fall or spring. Credit TBA. Prerequisite: permission of thesis advisor and coordinator of honors program. S–U or letter grades. HD faculty.

The Graduate Program

HD graduate courses are open to undergraduates only by permission of instructor.

General Courses

HD 6020 Research in Risk and Rational Decision Making
Spring. 3 credits. Limited to 5 students. Corequisite: HD 4200. S–U or letter grades. V. Reyna.
This hands-on laboratory course develops research skills in the context of risk and rational decision making in human development from multiple disciplinary perspectives and with respect to different kinds of decision-making under risk and uncertainty. Topics depend on student interests but may include decisions about war, terrorism, cancer control and prevention (e.g., screening tests), personal behaviors that involve risk (e.g., HIV prevention), and other public health risks (e.g., vaccinations), law enforcement (e.g., use of a weapon), and legal decision making (e.g., jury deliberations). Students read the research literature, discuss the latest empirical findings and scientific theories of risk and rationality, and engage in group work and peer review to hone their skills. Students then design research projects and engage in research activities as well as read additional references tailored to their interests.

[HD 6100 Cognitive Sex Differences
Fall. 3 credits. Limited to 20 students. S–U grades only. Next offered 2011–2012. S. Ceci.
Examines cognitive theories and empirical data that pertain to sex differences in cognition and achievement.]

[HD 6110 Psychology of Emotion
Spring. 3 credits. Next offered 2011–2012. A. Ong.
Takes a comprehensive look at current research and theory in the field of emotion. Students become familiar with theories, methods, and empirical research pertaining to the psychology of emotions. Topics include—but are not limited to—theoretical models of emotion, emotion antecedents, emotional responses (facial, subjective, and physiological), functions of emotion, emotion regulation, individual differences, and health implications.]

[HD 6120 Foundations in Developmental Science: Issues and Methods
Spring. 3 credits. Next offered 2011–2012. A. Ong.
Designed to expose graduate students to current theory and research on individual development across the lifespan. The emphasis is on issues and questions that have dominated the field over time and that continue to provide impetus for research.]

[HD 6140 Social and Psychological Aspects of the Death Penalty
Spring. 3 credits. Limited to 5 students. Prerequisite: Cornell doctoral students. S–U or letter grades. Next offered 2011–2012. C. Brainerd.
Focuses on how the field of human development contributes to death penalty cases through the creation of social history reports on death-qualified defendants and provides training in how to prepare such reports.]

[HD 6190 Memory and the Law (also LAW 7582)
Fall. 3 credits. Limited to 5 doctoral students. S–U or letter grades. Next offered 2011–2012. C. Brainerd.
Focuses on how the scientific study of human memory interfaces with the theory and practice of law. Students study relevant areas of memory research and memory theory.]

HD 6200 First-Year Proseminar in Human Development
Yearlong. 1 credit. Prerequisite: first-year HD graduate students. S–U grades only. B. Koslowski.
Designed as an orientation to the department and the university. Activities include attendance at research presentations, visits to departmental research laboratories, relevant informational sessions (e.g., University Committee on Human Subjects, College Grants), and guidance in preparing a public research presentation to be made at the end of spring semester.

HD 6210 Seminar on Autobiographical Memory
Spring. 3 credits. Prerequisite: graduate standing; seniors by permission of instructor. Letter grades only. Q. Wang.
This graduate seminar is designed to give an overview as well as in-depth analysis of topics related to autobiographical memory and its development. Readings focus heavily on current theories and empirical research on a wide range of topics including childhood amnesia, reminiscence bump, emotion and memory, memory accuracy, development and disruption, neurological perspectives, memory functions, and memory across cultures.

HD 6310 Proseminar on Cognitive Development
Fall. 3 credits. S–U or letter grades. M. Casasola.
Designed to help students develop a broad understanding of the mechanisms, processes, and current issues in cognitive development and learn to do critical, in-depth analyses of developmental research. Discusses how children's thinking changes over the course of development and evaluates psychological theories and research on various aspects of cognitive development. Topics include perception, representation and concepts, reasoning and problem solving, social cognition, memory, metacognition, language and thought, and academic skills.

[HD 6320 Cognitive Neuroscience Seminar: Applications of Brain Science to Behavioral Research]

[HD 6330 Language Acquisition Seminar (also COGST 6330, LING 6630)
Fall. 1–4 credits. Prerequisite: 3370 or equivalent or permission of instructor. S–U or letter grades. Next offered 2011–2012. B. Lust.
Reviews and critiques current theoretical and experimental studies of first language acquisition, with a concentration on insights gained by cross-linguistic study of this area.]

[HD 6340 Judgment, Decision Making, and Scientific Reasoning]

[HD 6350 Cultural Psychology
Spring. 3 credits. Letter grades only. Next taught 2011–2012. Q. Wang.
Focuses on cutting-edge research from the recently emerged, exciting field of cultural psychology.]

[HD 6360 Connecting Social, Cognitive, and Emotional Development
Fall. 3 credits. S–U or letter grades. Next offered 2011–2012. M. Casasola.
Opportunity for graduate students to explore several current areas of research from both a cognitive and a social-emotional perspective.]

[HD 6370 First-Language Acquisition]

[HD 6400 Infancy
Spring. 3 credits. Next offered 2011–2012. S. Robertson.
Examines development in infancy through a critical review of key research and theory in selected aspects of neurobehavior, perception, cognition, language, emotion, and social relationships.]

HD 6510 Interdisciplinary Community-Based Scientific Research in Health Disparities
Spring. 2 credits. Prerequisites: for Cornell graduate students only; two semesters of graduate-level statistics. S–U or letter grades. E. Wethington.
Introduces doctoral students to the principles and practices of community-based participatory research (CBPR) on health disparities. The course consists of a series of expert presentations from researchers and practitioners involved in community-based research projects in New York City. Individual seminar topics range from theoretical models of different models of CBPR and other translational research models, methodological education, ethical issues in community-based research, specific community research projects, and funding and publication issues. A primary emphasis is on exposure to interdisciplinary activities, diverse perspectives, and values provided by researcher and community-practice presenters.

HD 6520 Translational Research on Aging Research Seminar
Fall and spring. 1 credit. Prerequisite: Ph.D. students only or permission of instructor. S–U or letter grades. K. Pillemer, M. S. Lachs, E. Wethington, and M. C. Reid.
Introduces Ph.D. students to multidisciplinary research, proposal development, and journal article development in the area of aging and health. The course is organized as a work-in-progress seminar, videoconferenced between the Ithaca campus and Weill Cornell Medical College. At each monthly videoconference, participants discuss two or three works in progress, including grant proposals, funding opportunities, and papers about to be submitted. Participants are expected to have read the papers and proposals beforehand and each attendee is required to comment on each work.

[HD 6600 Social Development]

[HD 6740 Autism Spectrum Conditions
Spring. 3 credits. Limited to 25 students. Prerequisites: graduate students in doctoral program; master's students or undergraduates doing research may apply but are accepted only if actively involved in their own research program. S–U or letter grades. Next offered 2011–2012. Staff.
Graduate seminar emphasizing research methodologies and the development of research proposals addressing the neuroscience of autism and other neurobiologically based developmental disorders.]

[HD 6860 Graduate Seminar in Research Methods]

[HD 6870 Issues in Professional Development
Fall. 3 credits. Prerequisite: at least one semester of graduate-level course work. S–U or letter grades. Next offered 2011–2012. S. Ceci.
Provides graduate students with essential information about professional activities that are related to careers in the academy.]

[HD 6920 Seminar in Translational Developmental Science]

Individualized Special Instruction

HD 7000–8060 Special Studies for Graduate Students
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). S–U grades at discretion of instructor. Independent advanced work by graduate students recommended by their Special Committee chair with permission of the instructor.
HD 7000: Directed Readings. For study that predominantly involves library research and independent study.

HD 7010: Empirical Research. For study that predominantly involves collection and analysis of research data.

HD 7020: Practicum. For study that predominantly involves field experience in community settings.

HD 7030: Teaching Assistantship. For students assisting faculty with instruction. Does not apply to work for which students receive financial compensation.

HD 7040: Research Assistantship. For students assisting faculty with research. Does not apply to work for which students receive financial compensation.

HD 7050: Extension Assistantship. For students assisting faculty with extension activities. Does not apply to work for which students receive financial compensation.

HD 7060: Supervised Teaching. 4 credits. For advanced students who assume major responsibility for teaching a course. Supervision by a faculty member is required.

HD 8060: Teaching Practicum. 4 credits. For advanced graduate students who independently develop and teach an undergraduate topics course under the supervision of a faculty member.

HD 8990 Master's Thesis and Research
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis advisor. S–U grades only.

HD 9990 Doctoral Thesis and Research
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis advisor. S–U grades only.

POLICY ANALYSIS AND MANAGEMENT

R. Avery, chair (119A MVR, 255-2578); T. Evans, director of undergraduate studies; J. Cawley, director of graduate studies; W. White, director of Sloan Program; B. Hollis, executive director of Sloan Program; Faculty: D. Almond, R. Burkhauser, J. Cawley, R. Dunifon, L. Edlund, R. Geddes, J. Gerner, S. Kleiner, J. Kuder, D. Lichter, M. Lovenheim, C. Lucarelli, A. Mathios, J. Matsudaira, K. Musick, S. Nicholson, E. Owens, A. Parrot, E. Peters, P. Pollak, S. Sassler, K. Simon, S. Tennyson, W. Trochim, M. Waller. Emeritus faculty: J. Allen, J. Ziegler. Lecturers: H. Allen, J. Carmalt, N. Fabrizio, J. Lewis, D. Perosio, W. Schlesinger, M. Weidner

In the Policy Analysis and Management major, students and faculty study the effects of government policies on individuals and families, public health, education, crime, product markets, financial markets, and a wide variety of other social impacts. The research tools learned and used—robust theory, rigorous empirical quantitative skills, and practical applications to real-world policy issues—are highly sought after by the best in both industry and government.

Federal, state, and local government have a central impact on all aspects of American life. The federal government alone taxes and spends in excess of 25 percent of gross domestic product (GDP). Public policy is ubiquitous, covering almost all aspects of societal and market interaction, from the environment to immigration, banks to farming, and social security to crime. Among current major government legislative initiatives are national health care, financial market regulation, education policy, immigration, and tax policy. Getting legislation right is crucially important to individuals, families, and society at large. Studying, understanding, and learning from the impacts and externalities of government policy are at the heart of Policy Analysis and Management.

Making full use of the theories and methods from economics, sociology, psychology, and demography, Policy Analysis and Management majors first seek to understand the theoretical effect of government policy. Using robust data analysis techniques, PAM majors learn how to measure the magnitude of policy effects. Through published findings, Policy Analysis and Management faculty members help to inform the public debate.

Current Policy Analysis and Management faculty have expertise in health care, family/social welfare, financial markets, transportation, Social Security, FDA regulation of pharmaceutical advertising, education, crime, law, and the economics of obesity, among others. Undergraduate and graduate students take courses from, and conduct research with, experts in the field.

In addition to students entering the labor market into management, government and research positions, PAM attracts large numbers of pre-law and pre-MBA students, and students intending to pursue graduate studies in economics, sociology, and public policy. There is the potential to complete a five-year program resulting in either a B.S. and M.S. in Policy Analysis and Management, or a Master of Health Administration through the department's Sloan Program.

PAM 2000 Intermediate Microeconomics
Fall or spring. 4 credits. Prerequisite: ECON 1110 or equivalent. Students must enroll in a sec. T. Evans, R. Geddes, and staff.
Topics include theory of demand and consumer behavior including classical and indifference curve analyses; theories of production and cost; models for the following markets—competitive, monopoly, monopolistic competition, oligopoly, and inputs; general equilibrium; welfare economics; public goods; and risk.

PAM 2030 Population and Public Policy
Fall. 3 credits. D. Lichter.
Examines from a demographic perspective family policies that concern children and adults. Toward this end, it considers the relationships between family policies and demographic behavior. It also addresses the effects of family policies and demographic behavior on the well-being of children. Although this course focuses on the United States, it considers U.S. trends against the backdrop of changes in other industrialized countries.

PAM 2040 Economics of the Public Sector
Fall or spring. 3 credits. Prerequisite: PAM 2000. S–U or letter grades. J. Lewis, E. Owens, and staff.
The public sector now spends nearly two out of every five dollars generated as income in the U.S. economy. A thorough knowledge and understanding of this important sector is an essential part of training in policy analysis and management. This course provides an overview of the public sector of the U.S. economy, the major categories of public expenditures, and the main methods used to finance these expenditures. The principles of tax analysis and cost-benefit analysis are presented with a focus on the role of public policy in improving economic efficiency, promoting the goals of equity and social justice, and improving equity by altering the distribution of wealth and income.

PAM 2100 Introduction to Statistics
Fall or spring. 4 credits. J. Carmalt, J. Lewis, T. Evans, and staff.
Introduces students to descriptive and inferential statistics. Topics include hypothesis testing, analysis of variance, and multiple regression. To illustrate these topics, this course examines applications of these methods in studies of child and family policy.

PAM 2101 Statistics for Policy Analysis and Management Majors
Fall and spring. 4 credits. Prerequisites: PAM majors only or permission of instructor.
The primary intent is to prepare students to successfully complete PAM 3100 Multivariate Regression. Topics include data presentation and descriptive statistics, summation operator, properties of linear functions, quadratic functions, logarithmic functions, random variables and their probability distributions, joint and conditional distributions, expected value, conditional expectation, statistical sampling and inference, interval estimation and confidence intervals, hypothesis testing using t and F distributions, and an introduction to bivariate regression analysis. The course uses Excel initially to become familiar with data analysis, and then move onto Stata (a powerful statistical analysis computer program).

PAM 2150 Research Design, Practice, and Policy (also SOC 2130)
Spring. 3 credits. Prerequisite: PAM 2100 or equivalent. K. Musick.
Examines systematic approaches for addressing questions about poverty, family life, racial inequality, and a range of other issues central to public policy. It emphasizes the logic and methods of social science research, including the measurement of social phenomena, generalizing results to groups of interest, establishing cause and effect, social experiments, survey research, and qualitative methods. It develops skills to critically evaluate the research of others and provides hands-on experience applying research methods to policy-related problems.

PAM 2220 Controversies about Inequality (also PHIL 1920, DSOC/GOVT/ILROB/SOC 2220)
Fall. 1–4 credits. Prerequisite: permission of instructor. S. Morgan.
For description, see SOC 2220.

PAM 2300 Introduction to Policy Analysis
Fall. 4 credits. R. Avery.
Policy analysis is an interdisciplinary field that uses theories, concepts, and methods from disciplines such as economics, sociology, and political science to address substantive issues in the public policy arena. Students are introduced to the functions of and interactions between the major institutions (public and private) at the national, state, and local level involved in the policy making process. The course focuses on public policy analysis in the family/social welfare, health, and market regulatory areas and also includes an introduction to the technical skills required to undertake policy analysis.

[PAM 2350 The U.S. Health Care System
Spring. 3 credits. Next offered 2011–2012. S. Nicholson.]

PAM 3100 Multiple Regression Analysis
Fall and spring. 4 credits. Prerequisites: PAM 2100, AEM/ILRST 2100 or equivalent. Sec meets once a week. Fall, M. Lovenheim; spring, C. Lucarelli.
Introduces basic econometric principles and the use of statistical procedures in empirical studies of economic models. Discusses assumptions, properties, and problems encountered in the use of multiple regression procedures. Students are required to specify, estimate, and report the results of an empirical model.

[PAM 3240 Risk Management and Policy
Fall. 3 credits. Prerequisite: ECON 1110 and statistics course. Next offered 2011–2012. S. Tennyson.]

PAM 3280 Fundamentals of Population Health
Fall. 3 credits. Prerequisites: Sophomore standing or above and at least one of the following courses: HD 1150, HD 1170, HD 2180, HD 2510, SOC 1101, DSOC 1101, DSOC 2200, PAM 2030, PAM 3360, PSYCH 1101, FGSS 3500, PAM 3500. J. Carmalt.
Provides students with training in the language, theories, concepts, methods, measurement, analysis, and implementation of population health. A framework of core functions and essential features of population health is used to familiarize students with the unique challenges of disease surveillance, health measurement and monitoring, identification of health indicators and determinants, measuring health disparities, and developing population health policies and programs. Key to this course is the role of epidemiology in evaluating population health, and developing interventions to improve different populations' health and reduce health disparities. Students develop competencies in population health analysis and management such as identification, analysis, evaluation, estimation, inference, implementation, and evaluation that are valued not only in the job market but also welcomed in a variety of research and other employment fields.

PAM 3290 Health, Demographic Processes, and the Life Course
Spring. Prerequisites: sophomore standing or above and at least one of the following courses: HD 1150, HD 1170, HD 2180, HD 2510, SOC 1101, DSOC 1101, DSOC 2200, PAM 2030, PAM 3360, PSYCH 1101, FGSS 3500, PAM 3500. Recommended prerequisites: HD 1150, HD 1170, HD 2180, HD 2510, SOC 1101, DSOC 1101, DSOC 2200, PAM 2030, PAM 3360, PSYCH 1101, FGSS 3500, PAM 3500. J. Carmalt.
Provides students with broad training in the theories and methods of demography and the life course and their application to health behaviors and health outcomes. Emphasis is placed on identifying and understanding the determinants and consequences of demographic processes (e.g., relationship formation, education attainment, labor force participation, fertility) on physical and mental health within historic, social/structural, economic, and cultural contexts (e.g., social and geographic environments, media, religion). Socioeconomic, race-ethnic, and gender disparities in health and the role of health policy are addressed. This course is interdisciplinary in nature and allows students to draw from previous training in economics, sociology, demography, and policy analysis to enhance their analytic, methodological, and critical thinking skills as they apply to health. Students develop competencies in health and demography such as identification, analysis, evaluation, estimation, inference, problem solving, and interpretation, which are not only valued in the job market but also welcomed in a variety of research and other employment fields.

PAM 3300 Intermediate Policy Analysis
Fall. 3 credits. Prerequisites: PAM 2300, PAM 2000. D. Kenkel and staff.
In-depth treatment of methods for public policy analysis. The course focuses on cost-benefit analysis, a method grounded in microeconomics and applied welfare economics. Topics include market failures; willingness to pay; opportunity costs; discounting future costs and benefits; handling uncertainty and risk; incorporating distributional impacts; methods to value a statistical life; and methods to value environmental quality and other non-market goods. Numerous examples are taken from a variety of policy areas, including crime, education, health, welfare, and regulation.

PAM 3340 Corporations, Shareholders, and Policy
Fall. 3 credits. Prerequisites: ECON 1110, PAM 2000 and 2100. S–U or letter grades. R. Geddes.
Uses economic analysis to study the interaction of the market, the corporation, and the law and how these interactions affect the well-being of shareholders and consumers. Examines the costs and benefits of the corporate form of organization. The legal institutions defining the corporation, such as limited liability and shareholder voting, are analyzed along with regulations governing these institutions. A particular focus is mechanisms that control the behavior of managers. Those mechanisms include hostile takeovers, insider trading, outside directors on the board, the role of large investors, and executive compensation plans. Additional topics include government ownership of corporations and nonprofit enterprises.

PAM 3350 Families, Poverty, and Public Policy
Fall. 3 credits. M. Waller.
Considers the experiences and challenges of low-income families in the contemporary United States as documented in qualitative and policy research. The course also examines policies designed to assist these families. The first half of the course looks at topics such as the characteristics and causes of poverty, changes in family structure and the emergence of "fragile families," unmarried fathers' relationships with mothers and their children, and policies to encourage child support and marriage. The second half examines families' participation in the low-wage labor market and welfare system as well as socioeconomic variations in parenting and child well-being.

PAM 3360 Evolving Families: Challenges to Public Policy (also SOC 3360)
Spring. 3 credits. K. Musick.
Examines the social institution of the family, challenges to the institution's well-being and stability, and the role of public policy in these transformations. Topics include family structure and responsibilities; marriage as a traditional building block of the family and challenges to the institution of marriage, including divorce, nonmarital childbearing, cohabitation, and same-sex unions; children, and the impact of family change on their well-being, including the effects of child poverty, maternal employment, and paternal involvement. The role of public policy in managing and shaping these developments is discussed.

PAM 3370 Race and Public Policy (also SOC 3370)
Spring. 3 credits. S. Sassler.
Provides an overview of perspectives used in sociological studies of race and ethnicity. Students read classic and contemporary research on racial and ethnic relations in the United States. The first part of the course covers a variety of theories on race/ethnic relations and addresses issues related to the social construction of race, racial identities, and the impact of immigration on racial dynamics. Next, the course examines racial and ethnic inequality in social and demographic outcomes. It concludes with readings that explore interracial contact and multiracial populations.

PAM 3400 The Economics of Consumer Policy
Fall. 4 credits. Prerequisite: PAM 2000 or equivalent or permission of instructor. S. Tennyson.
Familiarizes students with the economic analysis of consumer policy issues. Uses the tools of microeconomic analysis to investigate the interaction between government and the marketplace, with an emphasis on how that interaction affects consumers. Examines the rationale for and effects of regulation of industry. Considers alternative theories of regulation, including the capture, economic, and public interest theories. Applies those theories to specific types of regulation, including economic regulation of specific industries (e.g., telecommunications, electricity, trucking, railroads, postal services) as well as to broader social regulation (e.g., health, safety, environmental). The effects of regulatory reform in numerous industries are also examined. An attempt is made to examine current topics relating to consumer policy.

PAM 3410 Economics of Consumer Law and Protection (also ECON 4410)
Spring. 3 credits. Prerequisite: PAM 2000 or equivalent. S–U or letter grades. J. Gerner.
Economic analysis of the roles played both by the courts and by federal and state regulatory legislation in altering consumer markets, consumer behavior, and consumer welfare. Topics include economic analyses of contract law, product liability, accident law and antitrust law, and the activities of such agencies as the Federal Trade Commission, the Food and Drug Administration, and the Consumer Product Safety Commission.

PAM 3440 Regulating Financial Institutions
Spring. Prerequisite: ECON 1110. Recommended: PAM 2300. S-U or letter grades. S. Tennyson.
Examines financial institutions and the way that these institutions are regulated in the United States and in other countries. The course provides a history and overview of regulatory institutions, considers the intent of regulatory policies, and evaluates regulatory outcomes. An important focus is on current public policy issues relating to financial institutions regulation.

[PAM 3500 Contemporary Issues in Women's Health (also FGSS 3500)
Spring. 3–5 credits. Next offered 2011–2012. A. Parrot.]

PAM 3800 Human Sexuality
Spring. 4 credits. Limited to 150 students. Prerequisite: introductory course in human development and family studies, psychology, or sociology (or equivalent social science course). Recommended: biology course. Two 75-minute lec and one sec per week. A. Parrot.
Provides students with an understanding of the interactions and interrelationships of human behavior that influence sexual development and behavior. Focuses on the evolution of sexual norms, cross-cultural customs, legislation within changing sociopolitical systems, and delivery of services related to sexual issues, needs, and/or problems. Addresses future trends in sexuality.

PAM 4000–4010–4020–4030 Special Studies for Undergraduates
Fall and spring. Credit TBA. S–U or letter grades. Staff.
For advanced independent study by an individual student or for study on an experimental basis with a group of students not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department field office. This form must be signed by the instructor directing the study, the student's faculty advisor, and the department head, and must be filed at course registration or within the change-of-registration period in the college registrar's office, 146 MVR. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department chair is necessary. Students, in consultation with their faculty supervisor, should register for one of the following subdivisions of independent study.

PAM 4000: Directed Readings. For study that predominantly involves library research and independent reading.

PAM 4010: Empirical Research. For study that predominantly involves data collection and analysis.

PAM 4020: Supervised Fieldwork. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

PAM 4030: Teaching Apprenticeship
Prerequisite: course (or equivalent) in which student is assisting and has demonstrated high level of performance.
For study that includes assisting faculty with instruction.

PAM 4050 Reproductive Health Policy (also FGSS 4051)
Fall. 3 credits. Prerequisite: PAM 2030, plus one of the following: PAM 3500, 3050, 3360. Recommended prerequisite: PAM 2300.
Focuses primarily on domestic reproductive health policies, although limited international reproductive health policies are addressed (e.g., the one-child policy in China). Emphasis is placed on structural issues that impact reproductive health policies, reproductive health services, scientific advancements, medical approaches, insurance, health disparities, organizations that provide reproductive health, and demographic issues relating to reproductive health (e.g., teenage pregnancy, infant mortality).

PAM 4060 Politics and Policy: Theory, Research, and Practice (also GOVT/ ALS/AMST 4998)
Fall, spring. Taught in Washington, D.C.
Introduces students to theories and methods of data collection techniques such as in-depth interviews, ethnography, focus groups, and surveys as well as mixed-method approaches used in policy and evaluation research. Addresses the strengths and weaknesses of various methods and the design of qualitative and mixed-method studies. Covers epistemology, ethics, induction and deduction, measurement, validity, and triangulation. Also discusses more concrete issues such as gaining access to a field site, developing a qualitative interview guide and survey questionnaire, conducting a qualitative interview, managing data, and assessing data quality.

PAM 4100 Causal Reasoning and Policy Evaluation
Fall. 3 credits. Prerequisites: PAM 2100, PAM 3100. Recommended prerequisites: PAM 2000, PAM 2300.
Teaches how to evaluate causal claims, e.g., about the effectiveness of government policies. Students learn to apply their knowledge of statistics and regression analysis to investigate the effectiveness of important health, welfare, and other public policies using data from real-life examples. Emphasizes the logic of causal inference, and critical thinking about what kinds of evidence are most convincing.

PAM 4330 Topics in Corporations and Policy
Spring. 3 credits. Prerequisite: PAM 2000, PAM 3100, PAM 3340. S–U or letter grades. R. Geddes.
Focuses on several current key policy issues relating to the corporate form of organization. The format is a mixture of lecture, discussion, and student presentations. Topics are chosen on the basis of their relevance to corporate governance, their relationship to important policy questions, and their timeliness. The course is designed to explore in greater detail topics discussed in PAM 3340 Corporations, Shareholders, and Policy that are presently in the policy arena. The number of topics is necessarily more limited. The course explores those topics by examining recent legal, economic, and policy literature to gain a thorough understanding of each topic. One particular focus of the course is the differing approaches to corporate governance internationally.

[PAM 4340 Economics of Criminal Justice Policy
Spring. 3 credits. Prerequisite: PAM 2000 or equivalent or PAM 3100. S–U or letter grades. Next offered 2011–2012. E. Owens.]

PAM 4360 Drugs and Gangs
Spring. 3 credits. Prerequisite: PAM 3330, PAM 3100, or permission of the instructor. S–U or letter grades. E. Owens.
Students examine the development of illegal markets and criminal gangs in the United States and evaluate government attempts to limit the size and scope of these activities. They study the evolution of street gangs, prison gangs, and organized crime from the 19th century to the present, focusing on their role in informal markets generally and drug markets in particular. Students read current and classic research from economics, criminology, sociology, and ethnography to develop a framework for thinking about the role of "illegal organizations" in American society.

[PAM 4370 Economics of Health Policy (also ECON 4370)
Fall. 3 credits. Prerequisite: PAM 2000, 3100, or equivalent. S-U or letter grades. Next offered 2011–2012. Staff.
Health care systems and health policy are undergoing rapid change as medical technology advances and costs rise. Debates concerning the delivery, regulation and financing of health care have intensified. This course uses basic economic tools to analyze central questions in health care today, as well as fundamental issues in health policy: For example, what is the current role of the government in the health sector, and what should it be? What is the social insurance role of the government, and how is it played out in policies that impact the health of the population? How is health insurance structured, and what are the implications of having employers be the providers of private health insurance? This course is about applying economic tools of policy analysis to gain insight into the workings of the health care system and to analyze current issues in health policy. It is mainly a U.S. institutions–based course, with some international comparisons. It should be of interest to students preparing for all kinds of careers in health care, and to others with an interest in important public policy issues.]

PAM 4380 Economics of Public Health (also ECON 4380)
Spring. 3 credits. Prerequisites: ECON 1110, PAM 2000, 3100, or equivalent. S–U or letter grades. D. Kenkel.
Uses the economic approach to study public health policies. Public health policies focus on tobacco, obesity, alcohol, illicit drugs, gun violence, sexually transmitted diseases, and other major causes of death and disease. Students apply the concepts of market failures and the principles of cost-benefit analysis to public health problems. Students examine how private sector advertising and public information campaigns, taxation, regulation, prohibition, and litigation affect public health. The course also examines policies to address health disparities related to socioeconomic status.

PAM 4440 Violence against Women: Policy Implications and Global Perspectives (also FGSS 4480)
Fall. 3 credits. Prerequisite: course in FGSS or PAM 2300. A. Parrot.
Violence is committed against women worldwide at an alarming rate. This course focuses on the historical and current reasons for and impact of violence against women both domestically and internationally. The impact of legislative, public, social, economic, or religious policies on the incidence of such violence is considered. Current and pending policies are identified and evaluated regarding their impact on violence against women in the United States and worldwide. Violence against women is committed to protect women's virginity, because women are viewed as property, for political reasons, as hate crimes, and in the name of culture, religion, and tradition. The types of violence discussed in

this course include rape, child sexual abuse, homicide, battering, domestic violence, hate crimes, gay bashing, kidnapping, ethnic cleansing, war crimes, forced prostitution, female genital mutilation, honor killings, public beating, lashing, stoning, torture, infanticide, trafficking of women, forced abortions, acid attacks, and sati (self-immolation). Each student is required to evaluate the impact of one current policy and critique the potential value of one pending policy relating to violence against women.

PAM 4460 Economics of Social Security (also ECON 4460)
Fall. 3 credits. Prerequisite: PAM 2000 or equivalent. S–U or letter grades. R. Burkhauser.
Provides students with an "economic tool-kit" for evaluating social policies. Economic analysis is used to predict the behavioral and distributional consequences of such policies. Students learn to use computer software on data from the Current Population Survey to estimate the economic well-being of both older people with disabilities, show how sensitive their results are to the methods used, and stimulate the effects of alternative policies on these outcomes.

PAM 4470 Families and Social Inequality (also SOC 4470)
Fall. 3 credits. Prerequisite: PAM 2030, PAM 2220, SOC 2208, or equivalent social science course. S–U or letter grades. K. Musick.
Disparities in family life are widening in the United States, with important implications for the well-being of family members and the reproduction of inequality from one generation to the next. Using tools of demographic analysis, this course explores growing education and income differences in family patterns (e.g., marriage, divorce, childbearing, and parenting), analyzing the forces behind these changes and the potential consequences for children's life chances.

PAM 4570 Innovation and Entrepreneurship in the Health Care Industry
Fall. 3 credits. Prerequisite: PAM 4350 or permission of instructor. J. Kuder.

[PAM 4760 Economic Evaluations in Health Care
Fall. 3 credits. Recommended: background in microeconomics and statistical tools. S–U or letter grades. Next offered 2011–2012. Staff.]

PAM 4770 Child Policy
Fall. 3 credits. Prerequisites: PAM 2000, PAM 3100. S–U or letter grades. J. Gerner.
Topics in public policy dealing with children, with a special emphasis on the impacts of policy on child outcomes. Topics include policy affecting education attendance, high-stakes testing and its impact on performance, policy impacts on family composition and change, and the effects of these on child outcomes.

PAM 4980 Honors Seminar
Fall. 3 credits. Prerequisites: PAM 2100, 2150, and 3100. Letter grades only. R. Avery.
Designed to help guide students through the development of their honors thesis. The objective of the course is to help students frame a research question that is appropriate for an honors thesis, identify an appropriate methodology to use in answering this question, identify data that can be used to answer this question, and identify literature appropriate to this question. Students also work collaboratively in critiquing research questions and techniques to be used. Students meet in a seminar-style class each week and also meet with the students individually and with their research mentor throughout the semester as they work on their thesis question and methods. Students who wish to participate in the PAM Honors Program must enroll in this course during their senior year. Students must receive a grade of B or better to continue in the Honors Program.

PAM 4990 Honors Program
Fall or spring. Credit TBA. Prerequisite: PAM 4980. Letter grades only. PAM faculty.
Provides students with the opportunity to undertake basic or applied research that will be preparation of a thesis representing original work of publishable quality. Intended for students who desire the opportunity to extend their interests and efforts beyond the current course offerings in the department. Furthermore, the program is designed to offer the student the opportunity to work closely with a professor on a topic of interest. The number of hours of thesis credit is determined by the student's research mentor. See the director of undergraduate studies for more details.

PAM 5280 Fundamentals of Population Health
Spring. 3 credits. J. Carmalt.
Provides students with training in the language, theories, concepts, methods, measurement, analysis, and implementation of population health. A framework of core functions and essential features of population health is used to familiarize students with the unique challenges of disease surveillance, health measurement and monitoring, identification of health indicators and determinants, measuring health disparities, and developing population health policies and programs. Key to this course is the role of epidemiology in evaluating population health, and developing interventions to improve different populations' health and reduce health disparities. Students develop competencies in population health analysis and management such as identification, analysis, evaluation, estimation, inference, implementation, and evaluation which are not only valued in the job market but also welcomed in a variety of research and other employment fields.

[PAM 5310 Ethics, Public Policy in American Society
Fall. 3 credits. Prerequisite: senior or graduate standing. J. Ziegler.
Explores current issues of ethics and public policy against a background of theories of ethical behavior. Examines questions of how public officials and managers of public and nonprofit agencies and private enterprises act. How do standards of ethical behavior in the professions get established? How are public policy issues with ethical implications resolved? Readings are drawn from political philosophy, contemporary social science, and imaginative writing. Class participation is essential.]

PAM 5470 Microeconomics for Management and Policy
Fall. 4 credits. Prerequisite: Sloan students only. S–U or letter grades. W. White.
Introduces microeconomic theory and its application to decision making in the management and policy arenas. Places special emphasis on the economic environment of health care organizations and the problems faced by managers in this environment.

PAM 5500 Operations and Planning of Senior Living and Related Facilities (also HADM 5503)
Fall. 2 credits. Prerequisites: junior status or above. Recommended prerequisite: PAM 2350.
This two-weekend, 2-credit course is designed to provide students with introductory knowledge and terminology regarding the rapidly growing fields of senior housing, CCRCs, and assisted living. The course exposes students to unique aspects involved in assessing feasibility, development, marketing and operations of these senior housing and related types of properties.

PAM 5520 Health Care Services: Consumer and Ethical Perspectives
Spring. 3–4 credits; 4-credit option may be used as Biology & Society senior seminar option. Limited to 30 students. Prerequisite: undergraduates by permission of instructor. A. Parrot.
Focuses on consumer and ethical issues faced by professionals in the health care field today. Broad topics discussed include ethical standards and guidelines, health care costs and accessibility of services, government role in health care delivery, health care as a right or privilege, private industry role in health care, services for the medically indigent and elderly, practitioner burnout and training, ethics of transplant surgery and funding, reproductive technology, AIDS research and funding, animals in medical research, right to die, and baby and granny Doe cases.

PAM 5540 Legal Aspects of Health Care
Spring. 3 credits. Prerequisite: Sloan students only. Offered alternate years. H. Allen.
Introduces principles of the law that specifically are applicable to health-service delivery. Topics include the liability of hospitals and their staff and personnel for injuries to patients, medical records and disclosure of information; consent to medical and surgical procedures, responsibility for patients' personal property, collection of bills, medical staff privileges, and confidential communications.

[PAM 5560 Managed Health Delivery Systems: Primary–Ambulatory Care
Fall. 3 credits. Prerequisite: PAM 5570 or permission of instructor. Next offered 2011–2012. J. Kuder.]

PAM 5570 Health Care Organization
Fall. 3 credits. Limited to 30 students. Prerequisite: Sloan students or permission of instructor. J. Kuder.
Graduate-level introduction to the organization of health providers in the United States, the interrelationships of health services and the major sources and methods of paying for care. Describes how health services are structured in the United States and how these different services interrelate along the continuum of care. Describes and analyzes organization, delivery, and financing issues from a variety of perspectives using specific performance

criteria (e.g., equity, quality, efficiency). Also presents innovations by the public and private sectors in the delivery and reimbursement of health care.

PAM 5620 Finance (also AEM 3240)
Spring. 3 credits. Prerequisite: Sloan students only. Staff.
For description, see AEM 3240.

PAM 5630 Health Care Financial Management II
Fall. 3 credits. Prerequisite: PAM 5620 or other financial management course. Staff.
Focuses on the financial analyses that managers in the health care industry use to make strategic and operating decisions. Begins by examining how health insurers design and price their products and manage enrollees' medical expenditures. Next reviews two different methods of valuing a medical product/service, and two methods of estimating the value of a company. The four valuation methods covered are net present value of free cash flows, decision tree analysis/real options, multiples, and the venture capital method. Seven cases allow students to apply these skills to examine decisions/situations such as determining why a Medicare HMO is losing money and recommending a redesigned benefit and reimbursement structure, estimating a health system's profitability by product line; valuing a drug that is being developed, valuing a pharmaceutical company, and valuing a drug using decision-free analysis in determining whether a medical device company should go public and how it should price its products.

PAM 5640 Health Care Resource Management and Quality Improvement
Spring. 3 credits. Prerequisite: strong basic computer skills. S–U or letter grades. J. Kuder.
Exposes students to the opportunities and challenges of using information technologies (IT), such as computerized physician order entry systems, electronic medical records, medical decision support systems, handheld devices for physicians, and remote patient monitoring devices, to improve the quality of medical care and/or reduce costs. Focuses on the manager's role in the application of IT to assess and improve the quality of medical care. Students develop a business plan for a company that uses IT to improve the quality of medical care in the U.S. health care system.

PAM 5660 Strategic Management and Organizational Design of Health Care Systems
Fall. 3 credits. C. Lucarelli.
Examines strategy and design issues faced by health care organizations. Topics include analysis of market conditions, organizational culture issues, development of an organizational mission and management strategy, the management of professionals, and the importance of roles, structure, and inter- and intra-institutional relationships within organizations. Taught via a case study approach.

PAM 5670 Health Policy
Fall. 3 credits. Prerequisite: Sloan M.H.A. students, Ph.D. students, or permission of instructor. S. Kleiner.
Addresses major health policy issues and the critical processes that influence them. Focuses primarily on the United States, with some coverage of health policy in other countries. Topics include Medicare, Medicaid, the uninsured, public health, the effect of welfare policy on health care, managed care development and regulation, state and federal health care reform, and many others. The course analyzes the politics of health policy in terms of legislative and executive processes; the forces involved including economic, social, ethical, and political factors; and key players in health policy, such as special interest groups, public agencies, and elected officials.

PAM 5690 Regression Analysis and Managerial Forecasting
Fall. 3 credits. Prerequisite: at least one statistics course. C. Lucarelli.
Teaches various statistical methods for managerial decision making, with a particular emphasis on regression and forecasting. Other topics include ANOVA, correlation, confounding, interaction, and statistical process control. Emphasizes applications to health care organizations.

PAM 5700 Health Care Accounting
Fall. 4 credits. Core course for Sloan M.H.A. students. W. Schlesinger.
Introduces the basic concepts of financial and managerial accounting with emphasis on health care applications. Explains the measurement system of business operations, business valuation, financial reporting, budgeting, cost allocation, service and product costing, and special reports for managerial use. Ethical and international issues are integrated throughout the course materials with real world applications. At the conclusion of the course, students should be able to read, understand, and analyze the annual financial reports of an organization. Collaborative learning, cases, discussions, readings, research, presentations, speakers, problem solving, videotapes, and lectures are used for teaching the course.

PAM 5710 Organizational Development/ Human Resource Management in Health Care Organization
Fall. 3 credits. Sloan students only. N. Fabrizio.
Explores (1) the theoretical foundation of organizational theory, research, and human resource management with an emphasis on implementation; (2) real-world problems while analyzing, exploring, and discussing varied interpretations of selected cases; (3) the building blocks of managerial activity, internal organizational issues, performance issues related to organization design, and strategic issues. Key organizational change and development concepts enhance students' perspectives on how the theories, strategies, and practices relate to today's organizations. The course serves as a framework to establish the theory and the conceptual and competency foundations necessary for applying interventions.

PAM 5740 Short Course in Fundamentals of Health Facility Planning for Managers
Spring. 1 credit. B. Hollis.
Provides M.H.A. and other students who may be interested in careers in health care management with a basic familiarity regarding some of the concepts and terminology related to health facility planning projects. The course touches on areas that a manager might encounter, including working with designers, the relationship between strategic planning issues and facility planning, basic cost estimating techniques, simplified plan interpretation, and use of architectural and engineering scales. The course have two primary components. One portion is lectures and hands-on demonstrations on plan reading/measurements and an overview of the process of project planning. We anticipate a tour of an active or recently completed project at either Cornell or Cayuga Medical Center as time allows. The other involves live or videoconference presentations from invited practitioners and researchers in the health facilities area.

PAM 5760 Long-Term Care and Lifestyle Alternatives for the Older Adult
Spring. 1 credit. M. Weidner.
Provides students exposure to, and fosters critical thinking about, policy and operational issues related to health care and living alternatives for the well, near frail, and frail older adult. Preliminary readings introduce the student to societal issues of the aging, clinical issues facing the older adult, and management operations for nursing homes, independent living communities, assisted living, and home care. Emphasis is placed on student interaction with instructors and other seminar participants regarding society and management issues. Case studies are used to enhance student interaction and participation.

PAM 5770 Marketing for Health Care Managers
Spring. 3 credits. Prerequisites: microeconomics and permission of instructor. D. Perosio.
Introduces students to the substantive and procedural aspects of marketing strategy and management. The course is designed to convey the key concepts of marketing and how they fit into the larger context of overall management strategy and decisions. Both the practical "how" and the fundamental "why" of marketing activities are explored. Course examples rely heavily on actual situations and experiences in the health care industry. Students apply their knowledge of marketing and health care management to the development of a marketing plan.

[PAM 5810 Measuring and Evaluating Health Program Performance and Quality
Spring. 3 credits. Prerequisites: PAM 5570 and basic multivariate statistics course or permission of instructor. S–U or letter grades. Next offered 2011–2012. J. Kuder.]

PAM 5900 Special Topics in Health Administration and Finance
Fall and spring. 1–3 credits. Prerequisite: Sloan students only. Adjunct faculty.
A special topics course specifically designed for students in the Sloan Program in Health Administration. Possible multiple offerings using adjunct faculty teaching in areas of expertise not covered in depth in the Sloan core curriculum and relevant to students preparing for careers in health management. Format ranges from intensive courses offered over several full days to longer courses meeting on a weekly basis.

PAM 5951/2 Field Studies in Health Administration and Planning
Fall or spring. 5951, fall. 1 credit; 5952, spring, 3 credits; 4 total credits. Capstone course for second-year Sloan students. J. Kuder.
Students interested in developing administrative and program-planning research skills are given an opportunity to evaluate an

ongoing phase of health care agency activity in the light of sound administrative practice and principles of good medical care. In planning and carrying out the research, students work closely with a skilled practicing administrator and with members of the faculty.

PAM 5990 Challenges and Trends in the Health Services Industry
Fall and spring. 1 credit. Prerequisite: graduate standing or permission of instructor. S–U grades only. W. White.
Provides students with information and exposure to current and emerging issues in the health services industry. Topics may include financial management of health care facilities, human resource management, information systems, cost-effective clinical decision making, quality measurement and outcomes, public health, and entrepreneurship in the health services industry.

PAM 6000 Special Problems for Graduate Students
Fall and spring. Credit TBA. S–U or letter grades. Staff.
Independent advanced work by graduate students recommended by their chair and approved by the department chair and the instructor.

[PAM 6030 Experimental, Quasi-Experimental, and Economic Evaluation Methods
Spring. 3 credits. Highly recommended: background in statistics (e.g., AEM 7100 or equivalent) and microeconomics (e.g., PAM 2000 or ECON 6390). Next offered 2011–2012. E. Peters.]

PAM 6040 Qualitative, Survey, and Mixed-Method Approaches to Policy Research
Spring. 3 credits. Prerequisite: Ph.D. students. Highly recommended: previous course in social science research methods. M. Waller.
Introduces students to theories and methods of data collection techniques such as in-depth interviews, ethnography, focus groups, and surveys as well as mixed-method approaches used in policy and evaluation research. Addresses the strengths and weaknesses of various methods and the design of qualitative and mixed-method studies. Covers epistemology, ethics, induction and deduction, measurement, validity, and triangulation. Also discusses more concrete issues such as gaining access to a field site, developing a qualitative interview guide and survey questionnaire, conducting a qualitative interview, managing data, and assessing data quality.

PAM 6060 Demographic Techniques (also DSOC 6080)
Spring. 3 credits. S–U or letter grades. D. Gurak and D. Lichter.
Provides an introduction to various demographic data sources (e.g., decennial census and vital registration data), measures of demographic processes and population structure (e.g., fertility rates and segregation indices), and standard demographic techniques (e.g., life tables, rate standardization, and population forecasting) used in social demography. The course emphasizes the application of demographic tools and interpretation.

[PAM 6090 Empirical Strategies for Policy Analysis
Spring. 3 credits. Prerequisite: graduate course in econometrics (e.g., ILRLE 7480–7490 or AEM 7100). Next offered 2011–2012. J. Matsudaira.
Focuses on empirical strategies to identify the causal effects of public policies and programs. The course uses problem sets based on real-world examples and data to examine techniques for analyzing nonexperimental data including control function approaches, matching methods, panel-data methods, selection models, instrumental variables, and regression-discontinuity methods. The emphasis throughout, however, is on the critical role of research design in facilitating credible causal inference. The course aids students in both learning to implement a variety of statistical tools using large data sets, and in learning to select which tools are best suited to a given research project.]

[PAM 6250 Economics of Family Policy
Fall. 3 credits. Prerequisite: PAM 6390 or ECON 6090 or permission of instructor. S–U or letter grades. Next offered 2011–2012. E. Peters.]

PAM 6280 Family Demography (also SOC 6280)
Spring. 3 credits. S–U or letter grades. D. Lichter.
This graduate seminar explores changes in family behaviors and household relationships from a demographic perspective. It focuses centrally on contemporary trends in the United States, considering (often competing) interpretations of the causes and consequences of family change and variation. Emphasis is placed on critically evaluating research in this area, including assessments of data quality, research design, and causal inference. Topics include cohabitation and marriage, divorce, fertility, family structure, and the intersection of work and family.

[PAM 6330 Seminar in Pharmaceutical Policy Issues
Spring. 2 credits. Meets once a week. S–U or letter grades. Next offered 2011–2012. S. Tennyson.]

PAM 6350 Consumers, Information, and Regulatory Policy
Fall. 3 credits. Prerequisites: PAM 6390 or calculus and intermediate microeconomics. S. Tennyson.
Examines information problems in markets and how they affect consumers, focusing on market mechanisms and regulatory actions that address those information problems. Major theoretical topics include price and quality uncertainty, moral hazard, adverse selection, and principal-agency theory. The course gives an overview of market mechanisms that deal with information issues such as marketing, advertising, warranties, third-party certification, licensing, and self regulation; the major regulatory institutions that govern consumer policy including the Food and Drug Administration and the Federal Trade Commission; and the way the legal system provides consumer protection. The market for pharmaceuticals is a particular focus. Primary reading material is drawn from economics and policy journals, and the papers from the *Journal of Public Policy and Marketing*.

PAM 6370 Microeconomics for Policy Analysis
Fall. 4 credits. Prerequisites: intermediate microeconomics, calculus. J. Cawley
Trains graduate students in using the tools of microeconomics to prepare them to conduct high-quality research in the social sciences. This comprehensive course covers microeconomic theory and its application to public policy analysis. Topics include consumer decision-making, the theory of the firm, general equilibrium, welfare economics, monopolies and oligopolies, strategy, and market imperfections. Weekly sections are held to review homework and teach supplementary material. Evening examinations are held, at times and dates to be determined.

PAM 6410 Health Economics I (also ECON 6410)
Fall. 3 credits. First course in Ph.D.-level health economics sequence. Prerequisites: Ph.D.-level courses in microeconomic theory and econometrics. J. Cawley.
Comprehensive course covering micro-economic theory and its application to health and health care markets. Topics include consumer decision making, the theory of the firm, welfare economics, monopolies and oligopolies, and market imperfections. Applications in health economics include the demand for health, rational addiction, the industrial organization of health care, cost-effectiveness analysis, price discrimination by health care providers, how consumers respond to information about health care, adverse selection in health insurance, and the moral hazard created by physician compensation strategies. Each student writes a research paper, testing predictions from microeconomic theory by acquiring suitable data and estimating the appropriate econometric model, and presents his or her findings in a research seminar.

PAM 6420 Health Economics II
Spring. 3 credits. Prerequisites: Ph.D.-level courses in microeconomic theory and econometrics. D. Almond.
Covers microeconomic theory and its applications to health and health care markets. Topics include consumer demand for health and health behaviors, the supply side of health promotion, the industrial organization of health care, and cost-benefit and cost-effectiveness analysis of health interventions. Second course in Ph.D.-level health economics sequence, but the courses may be taken in any order.

PAM 6720 Demography Proseminar (also DSOC 6720)
Fall. 3 credits. Staff.
Introduces graduate students to demography's substantive and methodological breadth from various disciplinary perspectives. The course consists of seven one- to two-week-long modules, each focusing on one of demography's substantive areas. The modules change from year to year reflecting student and faculty interests. The course is team taught by affiliated faculty of the Cornell Population Program.

PAM 6900 Professional Seminar in Public Policy
Fall. 2 credits. Prerequisite: Enrollment limited to Ph.D. and M.S. students in PAM (as well as Ph.D. students funded by PAM). S–U grades only. R. Dunifon.
This proseminar introduces new graduate students to the field of PAM. Students read

and discuss research papers by PAM faculty as well as other readings that provide an overview of the field of policy analysis and management and offer important tools and skills that can be used throughout the graduate career.

PAM 8990 Master's Thesis and Research
Fall and spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S–U or letter grades.

PAM 9990 Doctoral Thesis and Research
Fall and spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S–U or letter grades.

FACULTY ROSTER

Almond, Douglas, Ph.D., U. of California, Berkeley. Visiting Prof., Policy Analysis and Management
Ashdown, Susan, Ph.D., U. of Minnesota. Assoc. Prof., Fiber Science & Apparel Design
Avery, Rosemary J., Ph.D., Ohio State U. Prof. and Chair, Policy Analysis and Management
Becker, Franklin D., Ph.D., U. of California, Davis. Prof., Design and Environmental Analysis
Bisogni, Carole A., Ph.D., Cornell U. Prof., Nutritional Sciences; Assoc. Dean
Brainerd, Charles, Ph.D., Michigan State U. Prof., Human Development
Burkhauser, Richard, Ph.D., U. of Chicago. Prof., Policy Analysis and Management
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Peters, H. Elizabeth, Ph.D., U. of Chicago. Prof., Policy Analysis and Management
Pillemer, Karl A., Ph.D., Brandeis U. Prof., Human Development; Assoc. Dean
Reyna, Valerie, Ph.D., Rockefeller U. Prof., Human Development
Robertson, Steven S., Ph.D., Cornell U. Prof., Human Development
Sassler, Sharon, Ph.D., Brown U. Assoc. Prof., Policy Analysis and Management
Savin-Williams, Ritch C., Ph.D., U. of Chicago. Prof. and Chair, Human Development
Tennyson, Sharon, Ph.D., Northwestern U. Assoc. Prof., Policy Analysis and Management
Trochim, William M. K., Ph.D., Northwestern U. Prof., Policy Analysis and Management
Waller, Maureen R., Ph.D., Princeton U. Assoc. Prof., Policy Analysis and Management
Wang, Q. I., Ph.D., Harvard U. Asst. Prof., Human Development
Wells, Nancy, Ph.D., U. of Michigan. Assoc. Prof., Design and Environmental Analysis
Wethington, Elaine, Ph.D., U. of Michigan. Assoc. Prof., Human Development
White, William, Ph.D., Harvard U. Prof., Policy Analysis and Management
Williams, Wendy M., Ph.D., Yale U. Assoc. Prof., Human Development

Lecturers

Allen, Henry, J.D., Cornell. U. Lec., Policy Analysis and Management
Beck, Sam N., Ph.D., U. of Massachusetts. Sr. Lec., Urban Semester
Carmalt, Julie, Ph.D., Cornell U. Lec., Policy Analysis and Management
Curtis, Steven H., B.A., Syracuse U. Lec., Design and Environmental Analysis
Evans, Thomas A., Ph.D., Clemson U. Lec., Policy Analysis and Management
Fabrizio, Nick, Ph.D., Walden U. Lec., Policy Analysis and Management
Gilmore, Rhonda, M.A., Cornell U. Lec., Design and Environmental Analysis
Hollis, R. Brooke, M.B.A., Cornell U. Lec., Policy Analysis and Management
Lewis, Jeffrey, Ph.D., U. of Maryland, College Park. Lec., Policy Analysis and Management
Perosio, Debra, Ph.D., Cornell U. Lec., Policy Analysis and Management
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Schlesinger, Warren, M.B.A., Cornell U. Lec., Policy Analysis and Management
Scolere, Leah, M.A., Cornell U. Lec., Design and Environmental Analysis
Weidner, Michael, M.B., Cornell U. Lec, Policy Analysis and Management